

Sequence Protocol

V. newfirmed

<110> metaGen Gesellschaft für Genomforschung mbH (Assignee)

<120> Human Nucleic Acid Sequences from Normal Bladder Tissue

<140> PCT/DE99/01163

<141> 1999-04-14

<160> 431

<210> 1

<211> 1722

<212> DNA

<213> homo sapiens

<400> 1

```

cggtgaagta gatgcacaac agtgtatgct tgaaatcttg gatactgcag gaacggagca 60
atttacagca atgaggggatt tatacatgaa aaatggacaa ggatttgcatt tagttttattc 120
catcacagca cagtccacat ttaacgattt acaagacctg agagaacaga ttcttcgagt 180
taaagacact gatgatgttc caatgattct tggttgtaaat aagtgtgact tggaagatga 240
aagagttgta gggaagggaac aagggtcaaaa tctagcaaga caatggaaca actgtgcatt 300
cttagaatct tctgcaaaat caaaaataaa tggttaatgag atcttttatg acctagtgcg 360
gcaaattaac agaaaaactc cagtgcctgg gaaggctcgc aaaaagtcatt catgtcagct 420
gctttaatat actaaatgca ttgtagctct gagccaggctc tgaagaactg ttgccccatt 480
caacagtgcc agcattccaa ctttggttaa cctaccaaca tcttaaattg actttcctgt 540
gggtggtaccc ttaagagggc ggatgaaagc tactatatca gtttgcacat tctaactcact 600
ttccagttatc acaagagaga tttttactta tataatagtc cttagagtttg cagctggtaa 660
aaccagaggc tacatccagt attactgcta agagacattc ttcattccacc aatggtgtac 720
atgtatgaaa atgggtgtact gtatacttta acatgcccc aactttgtat tggagagtac 780
aataatgtaa atcctaaaag caccactatt ttagcataat aaaagaaagt ccaaagagct 840
cctatataga ctactccaga taacttcgct tctttgatac ttgtagctta ttgtaatttt 900
ttttaagaaa ttcaagggtc ttattattgt acaaaataag cgctttgatt aacacagcta 960
tatagttttt ttaattttta aaaaacctgt ggagacgggtg atcttgtctt taaaacatga 1020
tagtcctttc agtataatgt cttagattaa agacgttgcc tttaatatct gttgggaagg 1080
aaatgtccag acttttcaaa tctcttatta tatgtttcct ttttttgatt acatagggaa 1140
caatgtttat agtcgtgtgt acagtggggg tctacaacaa gaagtgtata ttttcaaac 1200
attttttaat gatttaacaa tttttgtaaa tcattttcag gcttctgcag ctgtagattc 1260
tcaactgtgaa tcccttgctt gctcatgcat aagtgtattt gcaataccaa atatacaggt 1320
ttagtatttt tgctgtttag tgattgtttc acatgtgtaa cgttttgggt gagatgttaa 1380
atggtggaag agtactgtgg atgtgaatgt gggaagtaat tttaatacata tgtaattggt 1440
cacaaggcct aatttgcagt aactattgct gttttattta acaatgcctt gttgctttgt 1500
atgcattaat gtttgatgt aaagattgtg tgtctatcca acaggagacc acagtattta 1560
aattgaccaa cctaattgta caactacttt gaggtggcca aatgtaaaact aaaagcctta 1620
attaaagtgg tgcaattttg tataacttag catcagtagt tcaataaatt tggattgcc 1680
tgcaagggct tgcattataa aaaaaaacia aaaaaaaaaa aa 1722

```

<210> 2

<211> 1187

<212> DNA

<213> homo sapiens

<400> 2

```

cggtctcagg aggcgggtctc ttctgtgcacc cacttggggc ctggaccccc tctcagcaat 60
ggccaccggc cggtctgcaca cgacttcccc ctggggcgggc actccccagc aggactaccc 120
cgaccctggg tcttgaggaa gtgctgagca gcagggactg tcacctgccc ctgcgcttc 180
ctcccggtt ccattccccac cgggggcccc attaccatc ctctctgccc gatcagatgc 240
agccgcaagt cccgcgcgtc cattaccaag agctcatgcc acccggttcc tgcagtcag 300
aggagcccaa gccaaagagg ggaagacgat cgtggccccg gaaaaggacc gccacccaca 360

```

```

cttgtgatta cgcgggctgc ggcaaaacct acacaaagag ttcccatctc aaggcacacc 420
tgcgaaacca cacaggtgag aaaccttacc actgtgactg ggacggctgt ggatggaaat 480
tcgcccgtct agatgaactg accaggcact accgtaaaca cacggggcac cgcccggttc 540
agtgcacaaa atgcgaccga gcattttcca ggtcggacca cctcgcctta cacatgaaga 600
ggcattttta aatcccagac agtggatatg acccacactg ccagaagaga attcagtatt 660
ttttactttt cacactgtct tcccgatgag ggaaggagcc cagccagaaa gcaactacaat 720
catgggtcaag ttcccaactg agtcatcttg tgagtggata atcaggaaaa atgaggaatc 780
caaaagacaa aaatcaaaga acagatgggg tctgtgactg gatcttctat cattccaatt 840
ctaaatccga cttgaatatt cctggactta caaaatgcc aaggggtgac tggaggttgt 900
ggatatcagg gtataaatta tatccgtgag ttgggggagg gaagaccaga attcccttga 960
attgtgtatt gatgcaatat aagcataaaa gatcaccttg tattctcttt accttctaaa1020
agccattatt atgatgttag aagaagagga agaaattcag gtacagaaaa ccatgtttaa1080
atagccta at gatgggtgtt gtgagcttgg tcctaaaggt cccaacaagg gagccaaagg1140
tttaaaactgc tggatccttg gcaaggggaa atctgtgttt ttttccg 1187

```

<210> 3

<211> 1478

<212> DNA

<213> homo sapiens

<400> 3

```

gcgaacccgc gcgctgcccg gtcttgcgct gccagcggg aggggctgga ccccgcggtc 60
ctcctccctg ccggtcccca tcttaaaagc gagagtctgg acgccccgcc tgtgggagag 120
agcgccggga tccggacggg gagcaaccgg ggcaggccgt gccggctgag gaggtcctga 180
ggctacagag ctgccgcggc tggcacacga gcgcctcgga actaacggag tgttcgctgg 240
ggctgtgagg ggagggcccc gggcgccatt gctggcggtg ggagcgccgc ccggtctcag 300
cccgccctcg gctgctctcc tctccgggt gggagggggc gtagctcgga gccgtcgcca 360
gccccggccc gggctcgaga atcaagggcc tcggccggcg tcccgagct cagtcctatc 420
cccttgccgg gcagcccggg cagagaccat gtttgacaag acgcggtctc cgtacgtggc 480
cctcgatgtg ctctgcgtgt tgctggcttg attgcctttt gcaattctta cttcaaggca 540
taccctcttc caacgaggag tattctgtaa tgatgagtc atcaagtacc cttacaaaga 600
agacaccata ccttatgcgt tattaggtgg aataatcatt ccattcagta ttatcgttat 660
tattcttgga gaaaccctgt ctgtttactg taaccttttg cactcaaatt cttttatcag 720
gaataactac atagccacta ttacaaaagc cattggaacc tttttatttg gtgcagctgc 780
tagtcagtcc ctgactgaca ttgccaaagta ttcaataggc agactgcggc ctacttctt 840
ggatgtttgt gatccagatt ggtcaaaaat caactgcagc gatgggttaca ttgaatacta 900
catatgtcga gggaatgcag aaagagttaa ggaaggcagg ttgtccttct attcaggcca 960
ctcttcgttt tccatgtact gcatgctgtt tgtggcactt tatcttcaag ccaggatgaa1020
gggagactgg gcaagactct tacgccccac actgcaattt ggtcttgttg ccgtatccat1080
ttatgtgggc ctttctcgag tttctgatta taaacaccac tggagcgatg tgttgactgg1140
actcattcag ggagctcttg ttgcaatatt agttgctgta tatgtatcgg atttcttcaa1200
agaaagaact tctttttaaag aaagaaaaga ggaggactct catacaactc tgcataaact1260
accaacaact gggaatcact atccgagcaa tcaccagcct tgaaaggcag cagggtgccc1320
aggtgaagct ggctgtttt cttaaaggaaa atgattgcca caaggcaaga gggatgcatt1380
tttcttctcg ggtgtacaag ccctttttaa gaccttctgc tggctgcgat gcctcttggaa1440
atgcacagtt gtgtgtaaca gagttacctt aactcgtg 1478

```

<210> 4

<211> 411

<212> DNA

<213> homo sapiens

<400> 4

```

gccacatttc cgggggttttg cgggccccgc gatgttttcc agagcttttc aagtgggaag 60
aggagagcga caacgtgaaa atgccccgtg ccggggcgct caccggagtc ctgccagctg120
tccggcgctg ggggtggact ctgatttatg aagctcccca tccacctatc tgagtacctg180
acttctcagg actgacacct acagcatcag gtacacagct tctcctagca tgacttcgat240
ctgatcagca aacaagaaaa tttgtctccc gtagttctgg ggcgtgttca ccacctacaa300
ccacagagct gtcattggct ccattctctac ttccatccct gtaatttcac agccccagtt360
cacagccatg aatgaaccac agtgcttcta caacgagtc attgccttct t 411

```

<210> 5

<400> 5

000

<210> 6
 <211> 3181
 <212> DNA
 <213> homo sapiens

<400> 6

```

cggggtggggt ggggagcaggg ggggacagtg ccccggaac ccggtgggtc acacacacgc 60
actgcgccctg tcagtagtgg acattgtaat ccagtcggct tgttcttgca gcattcccgc 120
tcccttccct ccatagccac gctccaaacc ccagggtagc catggccggg taaagcaagg 180
gccatttaga ttaggaaggt ttttaagatc cgcaatgtgg agcagcagcc actgcacagg 240
aggaggtgac aaaccatttc caacagcaac acagccacta aaacacaaaa aggggggattg 300
ggcggaaaagt gagagccagc agcaaaaact acattttgca acttgttggt gtggatctat 360
tggtgatctc atgcctttca actagaaaaat tctaattgatt ggcaagtcac gttgttttca 420
ggtccagagt agtttctttc tgtctgcttt aaatggaaac agactcatac cacacttaca 480
attaaggtca agcccagaaa gtgataagtg cagggaggaa aagtgcaagt ccattatgta 540
atagtgcacg caaagggacc aggggagagg cattgccttc tctgcccaca gtctttccgt 600
gtgattgtct ttgaatctga atcagccagt ctcagatgcc ccaaagtttc ggttccctatg 660
agcccggggc atgatctgat ccccaagaca tgtggagggg cagcctgtgc ctgcccctgtg 720
gtcagaaaaa ggaaccacaca gtgagcctga gagagacggc gattttcggg ctgagaaggc 780
agtagttttc aaaacacata gttaaaaaag aaacaaatga aaaaaatttt agaacagtcc 840
agcaaattgc tagtcagggt gaattgtgaa attgggtgaa gagcttagga ttctaatttc 900
atgttttttc cttttcacat ttttaaaaga acaatgacaa acaccactt atttttcaag 960
gttttaaaac agtctacatt gagcatttga aaggcgtgct agaacaaggt ctctgatcc1020
gtccgaggct gcttcccaga ggagcagctc tcccaggca tttgccaagg gaggcggatt1080
tccctggtag tgtagctgtg tggctttcct tccgaaagag tccgtggttg ccctagaacc1140
taacaccccc tagcaaaact cacagagctt tccgtttttt tcttctctgt aaagaaacat1200
ttcctttgaa cttgattgcc tatggatcaa agaaattcag aacagcctgc ctgtcccccc1260
gcacttttta catatatttg tttcatttct gcagatggaa agttgacatg ggtggggtgt1320
ccccatccag cgagagagtt tcaaaagcaa aacatctctg cagtttttcc caagtaccct1380
gagatacttc ccaaagccct tatgtttaat cagcagtgta tataagccag ttcacttaga1440
caactttacc cttcttgtcc aatgtacagg aagtagttct aaaaaaatg catattaatt1500
tcttccccca aagccggatt ctttaattct tgcaacactt tgaggacatt tatgattgtc1560
cctctgggccc aatgcttata cccagtgagg atgctgcagt gaggctgtaa agtggcccc1620
tgccggcccta gcctgaccgc gaggaaggga tggtagattc tgtaactct tgaagactcc1680
agtatgaaaa tcagcatgcc cgccagtta cctaccggag agttatcctg ataaattaac1740
ctctcagagt tagtgatcct gtccttttaa cacccttttt gtggggttct ctctgacctt1800
tcatcgtaaa gtgctgggga ccttaagtga tttgcctgta attttggatg attaaaaaat1860
gtgtatatat attagctaatt tagaaatatt ctacttctct gttgtcaaac tgaaattcag1920
agcaagttcc tgagtgcgtg gatctgggtc ttagttctgg ttgattcact caagagttca1980
gtgctcatac gtatctgtct attttgacaa agtgccctcat gcaaccgggc cctctctctg2040
cggcagagtc cttagtggag gggtttacct ggaacattag tagttaccac agaatacgg2100
agagcaggtg actgtgctgt gcagctctct aaatgggaat tctcaggtag gaagcaacag2160
cttcagaaag agctcaaaat aaattggaaa tgtgaatcgc agctgtgggt tttaccaccg2220
tctgtctcag agtcccagga ccttgagtgt cattagttac tttattgaag gtttttagacc2280
catagcagct ttgtctctgt cacatcagca atttcagaac caaaaggag gctctctgta2340
ggcacagagc tgcactatca cgagcctttg tttttctcca caaagtatct aaaaaacca2400
atgtgcagac tgattggcct ggtcattggt ctccgagaga ggaggtttgc ctgtgatttc2460
ctaattatcg ctagggccaa ggtgggattt gtaaagcttt acaataatca ttctggatag2520
agtcctggga ggtccttggc agaactcagt taaatctttg aagaatattt gtagttatct2580
tagaagatag catgggaggt gaggattcca aaaacatttt atttttaaaa tatcctgtgt2640
aacacttggc tcttggtacc tgtgggttag catcaagttc tcccagggt agaattcaat2700
cagagctcca gtttgcattt ggatgtgtaa attacagtaa tcccatttcc caaacctaaa2760
atctgttttt ctcacagac tctgagtaac tggttgctgt gtcataactt catagatgca2820
ggaggctcag gtgatctgtt tgaggagagc accctaggca gctgcaggg aataacatac2880
tgcccggtct gacctgttgc cagcagatac acaggacatg gatgaaattc ccgtttcctc2940
tagtttcttc ctgtagtact cctcttttag atcctaagtc tcttacaaaa gctttgaata3000
ctgtgaaaaat gttttacatt ccatttcatt tgtgttgttt ttttaactgc attttaccag3060
atgttttgat gttatcgctt atgttaatat taattcccgt acgtgttcat tttattttca3120
tgctttttca gccatgtatc aatattcact tgactaaaaat cactcaatta atcaataaaa3180
a

```

3181

<210> 7

<211> 1964
 <212> DNA
 <213> homo sapiens

<400> 7

```

gcaacatgtc tgcacccaac attggcattc ctcacacgca gagattgcaa gggcaaatgc 60
cagtgaaggg gcacatttcc atccgctcca agtctgcgcc actgccctct gcggtgctc 120
accagcagca gctgtatggc cgtagcccat cggcagttgc catgcaggct ggccctcgcg 180
cactggctgt tcagcgtggc atgaacatgg gggttaatct gatgcctact cccgcctata 240
atgtcaattc catgaatatg aacaccttga atgccatgaa cagctatcga atgacacagc 300
ccatgatgaa cagcagttac catagtaacc ctgcctacat gaaccagaca gcacagtatc 360
ctatgcagat gcagatggga atgatgggga gccaggccta taccagcag cctatgcagc 420
ctaaccctca tgggaacatg atgtacacag gcccctccca tcacagctac atgaacgctg 480
ctggcgtgcc caagcagtca ctcaacggac cttacatgag aagatgagca agatgaactt 540
gcaatcaaaa acttaaatat atataaataa aggaaccttt tatactgaca aaccagagaa 600
aaatggacct ttttccagtt aaaatattgc tgtagattta gaggaatttt tctttggttt 660
attttatttt ttagaaaaac tgatcttctc ttttttggg ttcattttgt tctgggtttt 720
ggttttcttc acaatcttga acattttaca gtagaactca tctaaaaatg gatttgggga 780
tggggaaaca tgcacaaagt cttttcataa ttaaaaagag cttacttttc tttacatacc 840
acatggacag aatttgtgta aaagtgaatt atctttattt taaaatgtat gtttcccttc 900
actgtttgca gctcccaatg ttgtcatttt taaatgttat atacatctca agggttaacc 960
agaccccttc ctccaaaccc aacctttcat ttcctacttc attccagcag gaggcactta1020
ggggagactc ggatggggac atgggagaaca acccaagctc cttaaactat taaagtggag1080
caggaaaaatg cttctccttt taaaatcccc tccactcttc acacacacac acctcttgaal140
acccttcccc aagaatgttt ctttatagac ggacttcatt gaaatctttg ttgttcttga1200
atcaagtgtat atataatttt tttcttcttt tttaaaaat tccactcag cactcagaga1260
cacaaaaata ctgtaagtct caattaacag cagaatctca gagaaaagct gtttgcaatc1320
caaatccagc ctttgaggga atagagatgg tcaattaaca atcaaaaaga ggagattaac1380
ctcttgtttt tttaccacct ggtgaatcag ccataacgca cacacacgcc acccagcctc1440
ttgtttctag tatgtacttt gaaatgctaa ctgagggctc tgatgcttga gcctttgact1500
gataaaaactc aaatagctgt cccagtgat ttgcctctta ggttctttct taaattgttg1560
gtggatgact gtacatttta gtgatttgaa aaataactga caaaccattg aaacagttta1620
ttttatgttg gaagagatgg cgcagatgtg tgtcagaagg gagatcacgg tgtgagtttc1680
gtagctattt aagtgtatca taccctctagt ttttgtatgt cttttgagat cctgagttca1740
tcccctgtga atcagagtgc acaagcact ctctgtgag tggctaata gaagagggac1800
agaccgacca ccagcacagt agggcagatc tggacagcag aatgttataa cgcaagttca1860
tgtgttgctc ccaactccat tctcttttct ctogtgcac cagtttgccc attctcttcc1920
tattacttgc tccagggata ggtaaaaaaa aaaaaaaaaa aaaa 1964

```

<210> 8
 <211> 1702
 <212> DNA
 <213> homo sapiens

<400> 8

```

ggacacccca ggtatgtgga cgagcagttc ctgtcacgcc tcttcctatt tgtggccctg 60
gtgatcatgt tctggctcct gattgcctaa tgctgggctc ctgcgtacat cctgtggcagg 120
gctctggact ggtgacgtgc caccccaact cctgggtgtt ggcttctctg ctaatcttga 180
ctcctggaat cagtgggac agtaacacat caaggagtct tgtttcttca tcagagcttt 240
ggaactcgag accagttggc gatgacccct gaatatcgcc accgctgtaa acactctata 300
acttcaggcc ttggcattga gtcactctct atgggtgaca ccatgaaatc ttgtttcagc 360
cagttctgca ggtcctgact ctgcagaggg aagaggcaga aagagagaaa ctgtcagagt 420
ataatttcaac ctgagtttaa tattacagaa acaaagggat gcaccaaagt gtatttctgg 480
aaattttcat gtcttttaaa accccttggt aagttgcttc tgaagccagt gggggctcct 540
cagatagaga gggtcccttt tcaaatccca gtgcgctct gttctctttc cttccctccc 600
cactccccct cttcttcttc tgtagagatg caagaaattg ctgtcccata aaaatcataa 660
ttgcagtatg taaagctggg gtcacttcgt gaattcacca gagactcaaa gatcttttat 720
tggtctctgg ctgtgctcag tgtctttggc ctcagagaa aacttgaatg acttctgggt 780
ttcctggcat aaattattcc tgggtgagaca tgttgcttaa ctcacaggtt tcccatcagc 840
tttctcccta aaactatgtt catctgcctc tctctgccag agaacataca gccgagaata 900
ctgccgaagc tgagactgac tactgtgcat taggaaagac ctggagtcag gactttgggtg 960
ggatttggag ctccgaggca gtaataactg aacaagcagc cctgtccctc aggtctcaga1020
agcttgaatg catcctctcc cagaacctgc cacaggaaac tgggggcttt gtcaggtcag1080

```



```

cccaactgca  tgcaaaagac  caccatcctc  agaagccaag  ttgtctttta  tgaagaggca1140
aggaaagggg  aaacccacat  gtgacctga  ttttggtatg  gcttgataga  gttccctgaa1200
aactccttgt  atgtgtgcta  aaaccaggga  agcatgtgac  tgccaagcag  gcaacccctg1260
atgatttgta  aagccagggtg  gcagggcctt  ggggagcccc  agcacaatga  tattgtgtgg1320
tcttccctcc  tgtggaatcg  aggggaaatt  attcttccca  atacctgat  ttgattttca1380
gtttcataag  cttcttcttc  tgaatcttat  tgagggaacta  tggtaggaag  caggtaggac1440
tggtcacctg  gtggaacagt  tcttgctctg  ccttctagge  ttcaccccag  aaatccagcc1500
tctttctgga  gaccccaaag  ctggaggagg  atgggctttc  ctctgggcct  ctcttctac1560
tttgccatcc  aactgtctcc  tggctaacc  cagcaagaac  caacaaatgg  gtagggaagc1620
cccatcta  tggctttttt  tcttcaatta  tggacgtgca  ttgttttgg  tgggaacaaa1680
aggttttgga  ggggagatgt  gg

```

1702

<210> 9

<211> 2067

<212> DNA

<213> homo sapiens

<400> 9

```

gccgcaggct  cccgggtgttc  ccatttccgag  aggagctcct  ggctgctatt  gcaaatacacc  60
aagtcctcat  cattgaaggg  gagacagggg  cagggaagac  caccagatc  ccgcagtatc  120
tctttgagga  ggggtatata  aacaagggta  tgaagattgc  ctgcacccaa  ccccgagag  180
tggctgccat  gagtgtggcc  gcccgagtgg  cccgggagat  ggggtgtgaag  cttgggaatg  240
aggttggcta  cagcatccgc  tttgaggact  gcacatcaga  gcgaactgtc  ctccgctaca  300
tgacagatgg  gatgcttctc  cgggagttcc  tctctgagcc  tgacctggcg  agttacagcg  360
tggtagtggt  ggatgaggca  cacgaaagga  ccctacacac  agacattctc  tttggattga  420
tcaaggatgt  tgctcgcttc  cgacctgagc  tcaaggctct  ggtggcttca  gccacaatgg  480
aactgccc  tttttccacc  ttctttgatg  acgcccctgt  gtttcgaatc  cccggacgca  540
ggtttcctgt  ggacatcttc  tacaccaagg  ctccagaggc  tgactacttg  gaagcttgtg  600
tagtatctgt  gttgcagatc  catgtgaccc  agccccctgg  ggatatcctg  gtgttcctga  660
caggacagga  ggagattgag  gctgctgtg  agatgctcca  ggatcgctgc  cggcgcctgg  720
gctccaaaat  ccgggagctc  ctgggtgtgc  ccatttatgc  caatctgcc  tctgacatgc  780
aggcccgtat  cttccagccc  acaccacctg  gggcacgaaa  ggtgggtgtg  gcaacgaaca  840
ttgctgagac  atcactcacc  attgagggca  tcatttatgt  gctggatcca  gggttctgta  900
agcagaagag  ctacaacccc  cgcacaggca  tggaaatcgct  cactgtcaca  ccctgcagca  960
aggcctcagc  caatcagcga  gctggcaggg  caggctcggg  ggctgcaggg  aagtgtctcc1020
gcctgtatac  cgcctgggccc  tatcagcacg  agcttgagga  aaccacagt  cctgagatcc1080
agaggaccag  cttgggcaat  gtcgtgttgc  tgctcaagag  cttagggatc  catgaccta1140
tgcactttga  tttcctggac  cctccaccat  atgagacact  gctgctggct  ttggagcagc1200
tgtatgctct  gggagccctc  aaccaccttg  gggagctcac  cagctctgg  cgaaagatgg1260
cagagctgcc  ggtggacccc  atgctgtcca  aaatgatctt  agcctctgag  aagtacagct1320
gttcagagga  gatcctgaca  gtggctgcca  tgctctctgt  caacaactcc  atcttctacc1380
gaccaaagca  caaggtcgct  catgctgaca  atgcccgtgt  caacttcttt  ctccctggcg1440
gtgaccacct  ggttctgcta  aatgtttaca  cacagtgggc  tgagagtgg  tactcttccc1500
agtgggtgcta  tgagaacttt  gtacagttca  gatcgatgcg  ccgagcccgg  gatgtgcccgg1560
aacagctgga  agggctcttg  gaacgtgtgg  aagttgggtct  cagttcctgc  cagggggact1620
atatccgtgt  acgcaaggcc  atcactgctg  gttactttta  ccacacggca  cggttgactc1680
ggagtggcta  ccgcacagt  aaacagcagc  agacagtctt  cattcatccc  aactcctccc1740
tctttgagca  acagccacgc  tggctgctct  accacgaact  tgtcttgacc  accaaagagt1800
tcatgagaca  ggtactggag  attgagagca  gttggcttct  ggaggtggct  cccattatt1860
ataaggccaa  ggagctagaa  gatccccatg  ctaagaaaaat  gcccacaaaa  ataggcaaaa1920
cacgagaaga  gctagggtaa  gagaaggacg  taaacagaac  ctgacaccag  ctctttttcc1980
ttctatacat  tatttaatac  ctattaaata  aaattatattt  tggataaaag  cttgtgggaa2040
catttgggat  ctgaaaaaaa  aaaaaaa

```

2067

<210> 10

<400> 10

000

<210> 11

<400> 11

000

<210> 12

<211> 2548

<212> DNA

<213> homo sapiens

<400> 12

```

gccgcagccc tcactctgcca ccgcagctctg gttggagctg ttgtctttgta tgctcagcga 60
ggcccgggaga gacccgggag agagctaggc cgagtcacc gcccgagtct gctgcccag 120
cccgcgttac gcacaaagcc gccgatcccc ggccctggggt gagcagagcg accaccgccc 180
gggagcagcg cggcgagacg cacggtgcgc cctatgcccc cgcgccccca ccgccccgc 240
cgcgccagcc gaagcgagc gagagaacgc gccaccgcgg ggcccgggtg cagctagcga 300
ccctctcgcc acctgcgcgc agcccagagt gagcagttag cggcgagcgg gagggcagcg 360
aggcgcttcgc gggccccctc ctgctgcccc ggcccggccc tcatggcggc catccgcaag 420
aagctgggtgg tgggtgggca cggcgcgctg ggcaagacgt gcctgctgat cgtgttcagt 480
aaggacgagt tccccgaggt gtacgtgccc accgtcttcg agaactatgt ggccgacatt 540
gaggtggagc gcaagcaggt ggaggtggcg ctgtgggaca cggcgggcca ggaggactac 600
gacccgctgc ggccgctctc ctaccggac accgacgtca ttctcatgtg cttctcgggtg 660
gacagcccg actcgtctgga gaacatcccc gagaagtggg tccccgaggt gaagcacttc 720
tgtcccaatg tgcccatcat cctggtggcc aacaaaaaag acctgcgcag gacgagcatg 780
tccgcacaga gctggcccgc atgaagcagg aaccctgtcg cacggatgac ggccgcgcca 840
tggccgtgcg catccaagcc tacgactacc tcgagtgtct tgccaagacc aaggaaggcg 900
tgcgcgaggt cttcgagacg gccacgcgcg ccgcgtgca gaagcgctac ggctcccaga 960
acggctgcat caactgctgc aaggtgctat gagggccgcg ccgctcgcgc ctgcccctgc1020
cggaacggct ccccctcctg gaccagtccc ccgcgagccc ggagaagggg agaccctgt1080
cccacaagga cccaccggc ctgcctggca tctgtctgtc gacgcctctg gcttgccgcca1140
ggacttggcg tgggcaccgg gcgcccccat cccagtgtct gtgtgcgtcc agctgtgttg1200
cacaggcctg ggctccccac tgagtgccaa gggctcccctg agcatgcttt tctgaagagc1260
cgggcctcag agtgtgtggc tgtgtgtctg ttgcactccc ctgccccat tttcacccca1320
ccccgcctc ggccgagatt gggcgagatt tcccttgtct gtaacataga ccccggttac1440
tgtcgggaggg gagggctgct ggggaggatg gggggatgtt atataaatat agatataatt1500
ttattttcgg agctaagatg gtgttattta agggtgggtga tgggtgagcg ctctggccca1560
ggctgggcca gactcccgcc caagcatgaa caggacttga ccatctttcc aaccctggg1620
gaagacattt gcaactgact tggggaggac acagcttcag cacagcctct cctgcggggcc1680
agcccgctgc gaacctoca ccagctaccg gagggaggag ggaggatgcg ctgtggggtt1740
gtttttgcca taagcgaact ttgtgectgt cctagaagtg aaaattgttc agtccaagaa1800
actgatgtta tttgatttat ttaaaggcta aaatttgttt ttttattctt tgcacaattg1860
tttcattgtt tgacacttaa tgcactcgtc atttgcatac gacagtagca ttctgaccac1920
acttgtacgc tgtaacctca tctacttctg atgtttttaa aaaatgactt ttaacaagga1980
gagggaaaag aaacccta aattttgctt tgtttccttg aagaatgtgg caaactgtt2040
ttgtgatttt atttgtgcag gtcatgcaca cagttttgat aaagggcagt aacaagtatt2100
ggggcctatt tttttttttt tccacaaggc attctctaaa gctatgtgaa attttctctg2160
cacctctgta cagagaatac acctgcccc gtatatcctt ttttcccctc cctcccctcc2220
cagtggtact tctactaaat tgttgtcttg ttttttattt tttaaataaa ctgacaaatg2280
acaaaatggg gagcttatga tgtttacata aaagttctat aagctgtgta tacagttttt2340
tatgtaaaat attaaaagac tatgatgat acatttttat aaaagaaatc ttgtgggtta2400
atagtgtgta aaaataccct tgtgaatttg gaacaagga gatattctcc taggcgagat2460
cctttcttgc caactccgtt tcccttatag caaatgtagt aaatgaggat gaagtccttt2520
tgagagcatg tgggggttgg gtgaccaa
2548

```

<210> 13

<211> 1673

<212> DNA

<213> homo sapiens

<400> 13

```

accaatgcac atgtagtaat caaatgtttg gggctagata ttatggtata caaaaaacat 60
taaaatcatg tggtttgcaa gcaaagcaaa catttttgcc aatgtttgca aattggccac 120
aaccacaaat tcaagaaatt ttttaaaaag acaaaagcca gcttacaaag atttgaccaa 180
taaaaccctc cgagcccaca gccttatcag ctgggggttg ggaagactg gtctaggtgc 240
tgctcctgaa cttggtctct gagccatggc ttcccataga cactcaggtc cctccagcta 300
caagggtggc accatggcgg agaagtttga ctgccactac tgcagggatc ccttgccagg 360
gaagaagtat gtgcaaaagg atggccacac ctgtgcctg aaatgctttg acaagttctg 420
tgccaacacc tgtgtggaat gccgcaagcc catcgggtcg gactccaagg aggtgcacta 480
taagaaccgc ttctggcatg acacctgctt ccgctgtgcc aagtgccttc accccttggc 540

```

```

caatgagacc tttgtggcca aggacaacaa gatcctgtgc aacaagtgca ccactcggga 600
ggactcccc aagtgcgaagg ggtgcttcaa ggccattgtg gcaggagatc aaaacgtgga 660
gtacaagggg accgtctggc acaaagactg cttcacctgt agtaactgca agcaagtcat 720
cgggactgga agcttcttcc ctaaagggga ggacttctac tgcgtgactt gccatgagac 780
caagtttgcc aagcattgcg tgaagtgcaa caaggccatc acatctggag gaatcactta 840
ccaggatcag ccctggcatg ccgattgctt tgtgtgtgtt acctgctcta agaagctggc 900
tgggcagcgt ttcaccgctg tggaggacca gtattactgc gtggattgct acaagaactt 960
tgtggccaag aagtgtgctg gatgcaagaa ccccatcact gggtttggtt aaggctccag1020
tgtggtggcc tatgaaggac aatcctggca cgactactgc ttccactgca aaaaatgctc1080
cgtgaatctg gccacaacag gctttgtttt ccaccaggag caagtgtatt gtcccgaactg1140
tgccaaaaag ctgtaaactg acaggggctc ctgtcctgta aaatggcatt tgaatctcgt1200
tctttgtgtc cttactttct gccctatacc atcaataggg gaagagtggg ccttcccttc1260
tttaaagttc tcttccgctc ttttctccca ttttacagta ttactcaaat aagggcacac1320
agtgatcata ttactattta gcaaaaagca accctgcagc aaagtgaatt tctgtccggc1380
tgcaatttaa aaatgaaaac ttaggtagat tgactcttct gcatgtttct catagagcag1440
aaaagtgcta atcatttagc cacttagtga tgtaagcaag aagcatagga gataaaaccc1500
ccactgagat gcctctcatg cctcagctgg gacccaccgt gtagacacac gacatgcaag1560
agttgcagcg gctgtcccaa ctcactgctt caccctgtt ctgtggagcc gggagaagg1620
accctactgg accatggcat ggggttaact ttcctcatca ggactctggc cct 1673

```

<210> 14

<211> 1593

<212> DNA

<213> homo sapiens

<400> 14

```

ggggccagga cgccgccccg cgcggagtgg ctgccctgcg cggggacact cagagcccgg 60
tgggcgggag gaaggcgcca tgccccagac ggtgatcctc ccgggcccctg cgccctgggg 120
cttcaggctc tcagggggca tagacttcaa ccagcctttg gtcacacca ggattacacc 180
aggaagcaag gcggcaactg caacctgtgt cctggagatg tcatcctggc tattgacggc 240
tttgggacag agtccatgac tcatgtgtat gcgcaggaca ggattaaagc agcagctcac 300
cagctgtgtc tcaaaattga caggggagaa actcacttat ggtctccaca agtatctgaa 360
gatgggaaag cccatccttt caaaatcaac ttagaatcag aaccacagga attcaaacc 420
attggtaccg cgcacaacag aagggcccag ccttttgttg cagctgcaaa cattgatgac 480
aaaagacagg tagtgagcgc ttcctataac tcgccaattg ggctctattc aactagcaat 540
atacaagatg cgcttcacgg acagctgctg ggtctcattc ctagctcacc tcaaaacgag 600
cccacagcct cgggtgcccc cgagtgggac gtgtaccgga tgctccacga caatcggaat 660
gagcccacac agcctcgcca gtcgggctcc ttcagagtgc tccagggaat ggtggacgat 720
ggctctgatg accgtccggc tggaaacgcg agtgtgagag ctccggtgac gaaagtccat 780
ggcgggttcag gcggggcaca gaggatgccg ctctgtgaca aatgtgggag tggcatagtt 840
ggtgctgtgg tgaaggcgcg ggataagtac cggcaccctg agtgcttcgt gtgtgccgac 900
tgcaacctca acctcaagca aaagggtac ttcttcatag aaggggagct gtactgcgaa 960
acccacgcaa gagcccgcac aaagccccc gagggctatg acacgggcac tctgtatccc1020
aaagcttaag tctctgcagg cgtggcacgc acgcacgcac ccacccacgc gcacttacac1080
gagaagacat tcatggcttt gggcagaagg attgtgcaga ttgtcaactc caaatctaaa1140
gtcaaggctt tagaccttta tcctattggt tattgaggaa aaggaatggg aggcaaatgc1200
ctgctatgtg aaaaaaacat acacttagct atgttttgca actctttttg gggctagcaa1260
taatgatatt taaagcaata attttttgta tgtcatactc cacaatttac atgtatatta1320
cagccatcaa acacataaac atcaagatat ttgaaggact ctaattgtct ttccttgaca1380
agttgatatt gcaattgtgg taaatagcaa ataacaatct tgtattctaa cataatctgc1440
agttgtctgt atgtgtttta actattacag tgcatgttag ggagaaattc cctgaatttc1500
tttagttttg tattcaaaca attatgccac tcgatgcaac aaacataata aatacataaa1560
agatttaaaa aataaaaaaa aaaaaaaaaa aaa 1593

```

<210> 15

<400> 15

000

<210> 16

<400> 16

000

<210> 17

<211> 1722

<212> DNA
 <213> homo sapiens

<400> 17

```

cattgttttgc caaaatccca ggcagcatgg acctcagttc tctctgggta cttctgcccc 60
tagtcacccat ggccctggggc cagtattggc attatggata ccataaccag cagtatcatg 120
actacagcga tgatgggttg gtgaatttga accggcaagg cttcagctac cagtgtcccc 180
aggggcaggt gatagtggcc gtgaggagca tcttcagcaa gaaggaaggt tctgacagac 240
aatggaacta cgccctgcatg cccacaccac agagcctcgg ggaaccacag gagtgtggtg 300
gggaggagat caacagggct ggcattggaat ggtaccagac gtgctccaac aatgggctgg 360
tggcaggatt ccagagccgc tacttcgagt cagtgtctgga tcgggagtgg cagttttact 420
gttgtcgcta cagcaagagg tgcccatatt cctgctggct aacaacagaa tatccaggtc 480
actatggtga ggaaatggac atgatttcct acaattatga ttactatatc cgaggagcaa 540
caaccacttt ctctgcagtg gaaagggatc gccagtggaa gttcataatg tgccggatga 600
ctgaatacga ctgtgaattt gcaaatgttt agatttgcca cataccaaata ctgggtgaaa 660
ggaaaggggc cggggacagg aggggtgtcca catatgttaa catcagttgg atctcctata 720
gaagttttctg ctgctctctt tctttctccc tgagctggta actgcaatgc caacttcctg 780
ggcctttctg actagtatica cactttctaat aaaatccaca attaaacat gtttctcact 840
tttcacatgt ttcatagcaa ctgctttata tgactgatga tggcttcctt gcacaccaca 900
tatacagtgc gcatgcttac agccgggctt ctggagcacc agctgcagcc tggctactgc 960
tttttactgc agaataaact gcaagttcag catagtggag gggagaggca gaactggagg 1020
agaggttcag tgaaggttct ctacagctaa gcctgtttga atgatacgtg ggttccccac 1080
caaaagcagg ctttctgccc tgaggagcat cttccactc ccctgctcca catgagccat 1140
gcatgcttag caatccaagt gcagagctct ttgctccagg agtgaggaga ctgggaggtg 1200
aaatggggaa atggaagggt ttggaggcag agctgaaaac aggggttgaa ggatttcctg 1260
aattagaaga caaacgttag catacccagt aaggaaaatg agtgagggg ccaggggaac 1320
ccgtgaggat cactctcaaa tgagattaaa aacaaggaa cagagaatgg tcagagaatg 1380
ggattcagat tgggaacttg tgggatgag agtgaccagg ttgaactggg aagtggaaaal 1440
aggagtttga gtcactggca cctagaagcc tgcccacgat tcttaggaag gctggcagac 1500
accctggaac cctggggagc tactggcaaa ctctcctgga ttgggctga tttttttggt 1560
gggaaaggct gccctgggga tcaactttcc ttctgtgtgt ggctcaggag ttcttctgca 1620
gagatggcgc tatctttcct cctcctgtga tgtcctgctc ccaaccattt gtactcttca 1680
ttacaaaaga aataaaaata ttaacgttca ctatgctgaa aa
1722

```

<210> 18
 <211> 1648
 <212> DNA
 <213> homo sapiens

<400> 18

```

tgaccaagaa acagggccta aggatcattt tctcggatgc atcacggctc atcttccggc 60
tcagtctctc cagtgggtgtg cgggccaccc tgcagactgt acgcagagag ctacgagagg 120
gatcccagcg gccatgacca ggagccacag gcagtgctga gccctctcat agccatcgca 180
ctgaaaatag cccagattca tgagagaact ggcgggaggg gacccactgt catcacctga 240
atagaggaaa gatcactcac cagggccaaa gagagtgtc agcgggagat gcttctactga 300
tgcttctctg ctacctgttt gtgctcttta tgactttgga aaaacaaaag atattttgct 360
tttgggggat agagggtggg tgggaaaaga aaaaaaatcc atttggtttt ggttttgtcc 420
tattcctcca aatgcagcag ggcccttagt tgtctgttaa agctgcacta taattttggt 480
totacatttt atcacacaaa ggaacctccc cttttgacaa caactgggct aggcagctgt 540
taatcacaac atttgtgcat cacttgtgcc aagtgaagaa atgttctaaa atcacaagag 600
agaacagtgc cagaatgaaa ctgaccctaa gtcccagggt cccctgggca ggcagaagga 660
gacactccca gcatggagga gggtttatct tttcactcta ggtcaggtct acaatggggg 720
aagggttttat tatagaactc ccaacagccc acctcactcc tgccacccac ccgatggccc 780
tgctccccc atcccatccc caacatccct gtaccacctt ctctcacatc ttctaaaagt 840
ttgtacaaat cacaatgggt cacttccaac aaaatatatc aataggtgtt ttctctctct 900
attttgtaaa tagtattatt ttactattga agctggatac cttctttcaa atccagccat 960
tcagttgtaa agttgggaag aagtttcttg acaagactct gcaattaaat gcttaaaatt 1020
tggaggggat ccttctctga ttacatcaag tatgttggtg catgggttta tacaagttcc 1080
tcttgagaag gcaaaaagac caccatgtgt gagagctctt tgacttggcc aatagggggc 1140
tatcttaaat cacttgtttg gacacatttc tgatcttatt tgtaaagggt gcaaaaaggag 1200
aggatgaaat gctgtaaaag taggaaatga agtggaagct ggaagaaaat gtaattgggt 1260
gtacagctat gggcagagtg gtggagggga ggtggggac ccctgccggc aagcagagtg 1320
tcacagctgg ctttctctac ttgggaaaag ggtactgccc gtctagcagc ctctctgtga 1380

```

```

ctcagccagg acacccagcg cgtgggacct gtttggtgtct gttttgcttc cttgggaacg1440
gcacagtcac tcaccctgcc atttgcgga atgacctggt gcactttgac tgttaagcaal500
tgcgttattg ctgtagtcaa ggtagtgca agcaaggaaa cattcccagt aaggatatttg1560
tttccatttt ctgtctgtgc ttctgtcaga aacttgctag gacttttagtg gccataaaaa1620
aagaaattcc taatttcaac cttaaaaa 1648

```

<210> 19

<400> 19

000

<210> 20

<211> 1610

<212> DNA

<213> homo sapiens

<400> 20

```

gcgcgctgat tggacgcgtg gggcgaggcg gaggagagcc gtgcgcacgg cgtatgtggg 60
gccgtgtgca gacccgcgtg tggcgagggc aaggacctc aaaataaaca gcctctacct 120
tgcgagccgt cttccccagg cctgcgtccg agtctccgcc gctgcggggc cgctccgacg 180
cggaagatct gactgcagcc atgagcagca atgagtgtct caagtgtgga cgatctggcc 240
actgggcccg ggaatgtcct actggtggag gccgtggctg tggaatgaga agccgtggca 300
gagggtttcca gtttggtttcc tctgtctctc cagatatttg ttatcgctgt ggtgagctctg 360
gtcatcttgc caaggattgt gatcttcagg aggatgcctg ctataactgc ggtagagggtg 420
gccacattgc caaggactgc aaggagccca agagagagcg agagcaatgc tgctacaact 480
gtggcaaaccc aggccatctg gctcgtgact gcgaccatgc agatgagcag aaatgctatt 540
cttggtggaga attcggacac attcaaaaag actgcaccaa agtgaagtgc tatagggtgtg 600
gtgaaactgg tcatgtagcc atcaactgca gcaagacaag tgaagtcaac tgttaccgct 660
gtggcgagtc agggcacctt gcacgggaat gcacaattga ggctacagcc taattatttt 720
cctttgtcgc cctccttttt tctgattgat ggttgattta ttttctctga atcctcttca 780
ctggccaaaag gttggcagat agaggcaact cccaggccag tgagctttac ttgccgtgta 840
aaaggaggaa aggggtggaa aaaaaccgac tttctgcatt taactacaaa aaaagtttat 900
gttttagttg gtagagggtg tatgtataat gctttgttaa agaaccctt tccgtgcca 960
ctggtgaata gggattgatg aatgggaaga gttgagtcag accagtaagc ccgtcctggg1020
ttccttgaac atgttcccat gtaggaggtg aaaccaattc tggaagtgtc tatgaacttc1080
cataataaac tttaatttta gtataatgat ggtcttggat tgtctgacct cagtagctat1140
taaataaac caagtaacat ctgtatcagg ccctacatag aacatacagt tgagtgggag1200
taaacaaaaa gataaacatg cgtgttaatg cgtgttcgag agaaatcgga ataaaagcct1260
aaacaggaac aacttcatca cagtgttgat gttggacaca tagatgggtg tggcaaagg1320
ttagaacaca ttattttcaa agactaaatc taaaaccag agtaaacatc aatgctcaga1380
gttagcataa tttggagcta ttcaggaatt gcagagaaat gcattttcac agaaatcaag1440
atgttatttt tgtatactat atcacttaga caactgtgtt tcatgtgtg taatcagttt1500
ttaaagtca gatggaaaga gcaactgaag tcctagaaaa tagaaatgta attttaaact1560
attccaataa agctggagga ggaaggggaa aaaaaaaaaa aaaaaaaaaa 1610

```

<210> 21

<211> 1108

<212> DNA

<213> homo sapiens

<400> 21

```

ggaggcgcgg ggagagtagg gtgctgtggt ctgagctaga ggggtgaagct ggaggacagg 60
aggatgggag tatgcagggt atagactaga gaacaagacc totgtctccg tagcatcctg 120
ggcgagcagt ctgaatgcca gaatggataa ccgttttgct acagcatttg taattgcttg 180
tgtgcttagc ctcattttcca ccatctacat ggcagcctcc attggcacag acttctggta 240
tgaatatcga agtccagttc aagaaaattc cagtgtattg aataaaagca tctgggtaga 300
attcattagt gatgaggcag atgaaaagac ttataatgat gcactttttc gatacaatgg 360
cacagtggga ttgtggagac ggtgtatcac cataccaaa aacatgcatt ggtatagccc 420
accagaaaag acagagtcac ttgatgtggt cacaaaatgt gtgagtttca cactaactga 480
gcagttcatg gagaaatttg ttgatcccgg aaaccacaat agcgggattg atctccttag 540
gacctatctt tggcggttgc agttcctttt accttttggt agtttaggtt tgatgtgctt 600
tggggctttg atcggacttt gtgcttgcac ttgccgaagc ttatatocca ccattgccac 660
gggcattctc catctccttg caggtctgtg tacactgggc tcagtaagtt gttatgttgc 720
tggaattgaa ctactccacc agaaactaga gctccctgac aatgtatccg gtgaatttgg 780

```

```

atgggtccttc tgccctggcct gtgtctctgc tcccttacag ttcattggctt ctgctctctt 840
catctgggct gctcacacca accggaaaga gtacacctta atgaaggcat atcgtgtggc 900
atgagcaaga aactgcctgc tttaacaattg ccatttttat ttttttaaaa taatactgat 960
attttcccca cctctcaatt gttttaattt ttaaattggg ggatatacca ttttattatg 1020
gaaaatccat ttaatttata caccattcac cactaaatac ccccttaat accccctaaa 1080
atttaagggg gggttaccta aagcgatg
1108

```

<210> 22
 <211> 675
 <212> DNA
 <213> homo sapiens

<400> 22

```

agggaaagag agagagaggc ctagacgaac acaatcacat gttttctttg ctgttcctcc 60
cgggatgggc ctgttttggg gtttgggact ctgaaccgga gcgggggttc ttcgcttgac 120
tttgatcctg gtccttaaat gcctttcccc actccctccc cgtgggttca ggggccaaagc 180
ggccctcctc cagagcacgg gcagcacctg ctctggacc cctgtgtgcc agcctctgca 240
gacgcagctg gtgggaggga gcatggattt ggaggtggag aagtcactcc tggtcctcgg 300
agggggtggg ctgtgtgcct agttcagtgt gactcgggga ttggtgaggg cggacagggt 360
tctgaggcct ccctagcctt ctttgtaaat tcacacgaga tagtccaggg ctttccagcg 420
cccagcttgg atgataatcc tcgtgtcccc cactctaagg cctccttgag atttctttgg 480
gggtctaccac gtcctctgcc tgtctccagg tggtagagga gatgtggttc ctgtccctct 540
cctgggtccc tagggggccc cagggccctt ccctgtagct ttagctgacc ccatggtggt 600
gggtgtgggg tctgtgcgcg tgctcaggta agcttggggg ctccaggtaa gcggtcccga 660
agaacggggg gggag
675

```

<210> 23
 <211> 350
 <212> DNA
 <213> homo sapiens

<400> 23

```

agcagagcaa ggttgggttc gtcctcttgg cagaacctcg gctctcagga ggtccttgtt 60
ccagggaaca gctgcttctc tgggggctgg ggcttctaac ttccctggca gcccctcggc 120
actaaccag ctggaaacca ggggaacaaa cggcctggag tgccaaacct ttcgtgtcta 180
ttttttccag aaaaacgggg gcaatggctg ttgaggagcc catttgggaa gaactgggtgc 240
ctctaattgg gcaaatggat tctgcagggg gctgcagttg ggcagggaaa attccttcaa 300
acaaggggtt ccacccaaac ccaggccccc gcttcaaatg gccagaaaaa
350

```

<210> 24
 <211> 746
 <212> DNA
 <213> homo sapiens

<400> 24

```

ccccccctcc tccggctttt ttttttttat ttaagaaaat ttatttctac ttctacagca 60
gaaatacggg aatgggtacag gtttgggcaa atcatacttt atgaaatgga tcctcatacc 120
acatcctttt taatacaggc acgttataac ataattcctg gatthttcaa atccagccaa 180
cacggatacc tctgtactc tgttttggcc ttcatagctg cttcctcttt cagacgagct 240
ttcttttcta agttcaagct tgtaaagtc tcgtgtcttt gggcagcctt cttgcccctca 300
ataaccatga agatgcatcc taccaccgtc agggcaatca ttagatagct gatcttcaact 360
cgcattctgt tctttgcagc atcaagcatc tccaacgaga cagtctctgg gatttcatct 420
tcctttttga agcgacctga ccataatgagg atctttttct gccaatccgt aggtttgtgt 480
aaaggcactc tgttgtaagt gcgggatgga gctccgggac ttctctgtgg ttttgtgcaa 540
aatccattta ttctcttcaa atcagagctt ctggtaagcc ttagagatga ggaaacatct 600
ctttcacata acctaaaaca gcttctctgt gccaggcgca gaccgctgag gctccccatg 660
gccacttgct actccgcgca ccagcgcaga acttcgccgg ggacgggtggc gctggtgagc 720
tcaatgtcac ccagcggttg agtggg
746

```

<210> 25
 <211> 217
 <212> DNA

<213> homo sapiens

<400> 25

```

agtgtatggc agcaaattgag ggatcataac tctcagttta ttgatgatta ttcattctca 60
gatggaggag tttatccgtc agccacttca gtttcgtctt aaaacaggag cccacaggac120
ccaaggaact attaaggagg accaggaacc taggtttttt ctttcaaaaa attggcccta180
gccaataaaa tgaaggaaaa aattaggcac cttttttt                217

```

<210> 26

<211> 392

<212> DNA

<213> homo sapiens

<400> 26

```

gcggatccgg cgttctccac tgatcttttc caaggctgta cagacatggc ggcggctttt 60
cggaaggcgg ctaagtcccg gcagcgggaa cacagagagc gaagcagtga ctaccgtaaa120
aaacaagaat acctcaaagc tcttcggaag aaggctcttg aaaaaaatcc agatgaattc180
tactacaaaa tgactcgggt taaactccag ggtggagtag atattattaa ggagactaag240
gaagaagtaa cccagaaca actaaagctg atgagaactt caggacgtca aatatatagg300
aagggaagag ggtgcagaag ctaagaaaaa cgaagactaa aatcagggcc catctgctgg360
ttgcagggga ggcaggaaaa ggttggtttt tt                392

```

<210> 27

<211> 1796

<212> DNA

<213> homo sapiens

<400> 27

```

cggctcgaac gtattagttg ttcttaattt ttttccagc aaaatatgga tcttttaaga 60
agaatttgag aagcaaacaa ttacatgtca tgtcaagggg gtagcagatt ccattcgttt 120
tcaatattgc cacaataccc agggattaat gctgccacag gggggcaatc tttatttgtc 180
ttacttctta ccccttccct gttctgcctc ttttaactcag ttaagttgtt ctgtttggga 240
cctggaaaaa aaccctgagt aaacctgagt ggacaggttc atttctggaa tgcagaaaaa 300
atttttaagg ctgatttttt agaataattt caactagcat tctttccatt gatttgaagg 360
ggaaattaac tattataatc tcttgaatcc aaaactggat attaagaact ttccccctta 420
ctaagtttaa gacttttgtc atgtgggtgag tcaaataaga ccattttgat tgtaaacat 480
aaaatagttc agcaagtagc ccacagttct ggcctaacag cagacttgct gttttcactt 540
ggatctctgg agttgggttg ctaaccttaa tttctatgat gttttctaaa atgaaacttg 600
ataaagtaga ccaccagctg caccgtgttt tctgtaaaag tattgttagt aagtggccaa 660
gagacttgag gaaaatacag attttttgtt taccttggtc ttgttttaag tcttaaaaaa 720
ttaaagataa cattataatg tagaatacag atgggacata gtccttgtaa gcttcccttg 780
aaaatgtttt aaatatattg gaagctttta aaagacacta aattgtactc taaaagacac 840
taaattgtac taattgtaca aaggtcaagc caattttatg aaacagtcct acagagtaat 900
atatgtgatg cagtgtgaag aggaaaatac tcatctctaa cattatggta ataacattta 960
gcctcttagg agttggagca gggggatggg taattacaga tttgcagact atagaaaagag1020
tttcattttt ttgtgacccc acagagtctc aaatttttat ttcactacct gctagagcct1080
actgtgaaat cactgctcca tatttgccag tggaggaaat gggcatagag tagagaatag1140
cttcatatgt ttacacgttt gcatagacta cacacatgtc atgcgtttat ggcaggtagc1200
tggtattttt tccccaaagt aataatgttg aagtatgggt ctcatcatc ccatacacag1260
aaacacaaaa cactttgatc ataaactttt ttcttcagaa gccaaactaa cttgcagaat1320
aatagagcca ctggtttaat gtttccctca agtggtttt agtgtaagct agtattctgt1380
gtgttcgtag aaatgattca atacctgcag ctggtgaatt aggaattgta tttgttgctt1440
tttttatatt agatgaggtg caaaaatttt aatgctagtc agtatgcacc accacaggaa1500
agtttagatc cattagcact tgaaactaca gctttggaaa cttaggctaa gttaatttgg1560
atttgttact tgattcacct actgaccttt tcttttgttt gaagtgccta tcagcataat1620
gagctaagtg tcatgcatat ttgtgaagaa acaccctttt tgggtccctt tgggacagag1680
aggtactcct tgatctttat gaatgacagg ttactgtttt gccttattgc ttaacttaat1740
gtagtgaat aaagcagaca aagcttgaaa aaaaaaaaaa aaaaaaaaaa tcgacg 1796

```

<210> 28

<400> 28

000

<210> 29
 <211> 2927
 <212> DNA
 <213> homo sapiens

<400> 29

```

gaagaaaaaag agggaggaaaa aggtaggggag aaataaaaggg aggagagaag cacagtgaaa 60
gaaaaaaaaa gtccctttttc gacatcacat tcctgtgttt tocctcagcc tggaaaaacat 120
attaatccca gtgctttttac gcccggaac aaagagacta agccagacta tgggggaaag 180
ggagataaga aggatcctgg aacttttaaag agggaaagag tgagattcag aaatcgccag 240
gactgggactt taagggaact cctgtgtcag cacaagggac tggcacacac agacacacga 300
gaccgaggag aaactgcaga caaatggaga tacaagacta tagaaggaca gctccttttca 360
cctcatcctca cttgtccaga aggtaaaaag acacagccag aaagaaaagg catcgggtca 420
gctctcagat caggacaggc tgtggatctg tggcggtact ctgaaagctg gagctgcagc 480
acaccccttt tgtattgtct accctcggtt aagagagaga gggctgggag gaaaagtagt 540
tcattctagga aactgtcctg ggaaccaaac ttctgatttc ttttgcaacc ctctgcattc 600
catctctatg agccaccatt ggattacaca atgacatgga gaatgggacc cgttttctact 660
atgctgtttg ccatgtgggt agtgtgtgga tcagaacccc acccccatgc cactattaga 720
ggcagccacg gaggacggaa agtgcccttg gtttctccgg acagcagtag gccagctcgg 780
tttctgaggg acactgggag gtctcgcgga attgagagat ccactctgga ggaaccaaac 840
cttcagcctc tccagagaag gaggagtgtg cccgtgttga gactagctcg cccaacagag 900
ccgccagccc gctcggacat caatggggcc gccgtgagac ctgagcaaag accagcagcc 960
aggggctctc cgcgtgagat gatcagagat gaggggctct cagctcgggtc aagaatgttg1020
cgtttccctt cgggggccag ctctcccaac atccttgcca gctttgcagg gaagaacaga1080
gtatgggtca tctcagcccc tcatgcctcg gaaggctact accgcctcat gatgagcctg1140
ctgaaggacg atgtgtactg tgagctggcg gagaggcaca tccaacagat tgtgctcttc1200
caccaggcag gtgaggaagg aggcaagggt agaaggatca ccagcgaggg ccagatcctg1260
gagcagcccc tggaccctag cctcatccct aagctgatga gcttccctgaa gctggagaag1320
ggcaagtttg gcatggtgct gctgaagaag acgctgcagg tggaggagcg ctatccat1380
cccgttaggc tggaaagccat gtacgaggtc atcgaccaag gcccctccg taggatcgag1440
aagatcaggg agaagggctt tgtccagaaa tghtaaggct ctggtgtaga gggccaggtg1500
gtggcgaggg ggaatgacgg tggaggggga gcaggaaggc caagcctggg cagcgagaag1560
aagaaagagg acccaaggag agcacaagtc ccaccaacca gagagagtct ggtgaaggct1620
ctgagaaaaa tggccgcccac tgcaccagct ttgccccaac ctccctcaac cccagagcc1680
accacccctc ctctgcccc agccacaaca gtgactcggg ccacgtcccg ggcggtaaca1740
gttgctgcaa gacctatgac caccactgcc tttcccacca cgcagaggcc ctggaccccc1800
tcacccctcc acagggcccc tacaaccact gaggtgatca ctgccaggag accctcagtt1860
tcagagaatc tttaccctcc atcccggag agcttcacaa atgcccctcc caccaccatc1980
aggaggccca gcaaggccac cagcttggag agcttcacaa atgcccctcc caccaccatc1980
tcagaaccca gcacaagggc tgctggccca ggcggtttcc gggacaaccg catggacagg2040
cgggaacatg gccaccgaga cccaaatgtg gtgccaggtc ctcccaggcc agcaaaggag2100
aaacctccca aaaagaaggc ccaggacaaa attcttagta atgagtatga ggagaagtat2160
gacctcagcc ggcctactgc ctctcagctg gaggacgagc tgcaggtggg gaatgttccc2220
cttaaaaaag caaaggagtc taaaaagcat gaaaagcttg agaaaccaga gaaggagaag2280
aaaaaaaaaga tgaagaatga gaacgcagac aagttactta agagtgaaaa gcaaatagag2340
aagtctgaga aaaagagcaa gcaagagaaa gagaagagca agaagaaaaa aggagggtaaa2400
acagaacagg atggctatca gaaacccacc aacaaacact tcacgcagag tcccaagaag2460
tcagtggcgg acctgctggg gtcccttgaa ggcaaacgaa gactccttct gatcactgct2520
cccaaggctg agaacaatat gtatgtgcaa caacgtgatg aatatctgga aagtttctgc2580
aagatggcta ccaggaaaat ctctgtgatc accatcttcg gccctgtcaa caacagcacc2640
atgaaaatcg accactttca gctagataat gagaagccca tgcgagtggg ggatgatgaa2700
gacttggttag accagcgtct catcagcgag ctgaggaaaag agtacggaat gacctacaat2760
gacttcttca tgggtgctaac agatgtggat ctgagagtca agcaatacta tgagggtacca2820
ataacaatga agtctgtgtt tgatctgatc gatactttcc agtcccgaat caaagatatg2880
gagaaccaga agaggggggt tttttttgaa gggggaaaaa cgcccc 2927

```

<210> 30
 <211> 743
 <212> DNA
 <213> homo sapiens

<400> 30


```

tccgtggggc tttaaaaaat ggttggtgggt gtgtggggtt ttttgagggtg ggagaggatg 60
tgtgaaaatc ttttccaggg aaatgggttc gctgcagagg taaggatgtg ttcctgtatc 120
gatctgcaga caccagaag gtgggtgcac actgcatgct tgggggtgcc aagggttcg 180
agacctccaa cataactgtc tgaagctcgt gccgctggcc atggccctc tgccaagcct 240
gtgtgcgatg cccttgggtg tttagtgcag gaagcctagg ctcagaagca cagcagcgcc 300
atctttccgt ttcaggggtt gtgatgaagg ccaaggaaaa acatttatct ttactatctt 360
acctacgtat aaagttttag ttcattgggt gtgcgaaaca ccctttttat cacttttaaa 420
tttgcacttt attttttttc ttccatgctt gttctctgga catttgggga tgtgagtgtt 480
agagctgggt agagaggagt caggcgccct tcccaccgat ggtcctggcc tccacctgcc 540
ctctcttccc tgccgatca ccgctttcca atttgccctt cagagaactt aagtcaagg 600
gagttgaaat tcacaggcca gggcacatct tttatttatt tcattatgtt ggccaacaga 660
acttgattgt aaataataat aaagaaatct gttatatact tttcaaaatc caaaaaaag 720
tagggagggt aagaaaaagg gcg                                     743

```

<210> 31
 <211> 1667
 <212> DNA
 <213> homo sapiens

<400> 31

```

agagccaata gcatgggggt tacaaggcaa agatagtcac tcattcaaca catattcata 60
gagctccttc totgtgccag aactgttct ggaagatagc tagatgaaa tctgtgcact 120
cacagagctt acatgccagt gagtgaagat cgatgataaa taaagcaaat gcatcatatg 180
ttcacatttg ataagtatat gccaaaaaat gaagccggga aggaggacaa ggcccatggg 240
tgggtgttga ggttttttaa gtgtgggtcag gaaaggcccc actgataagg taacatttga 300
gcaagtctga aaaaggcaag gggatctttg gggctaactt cgggatccct gcactttatg 360
taagaatgta aacctggagt ctcatttaag aatgatcagc aatacgttta gaacatatga 420
actgaatgaa atggacattt tttcttaatt tacgtataaa tccatatgat tatacataaa 480
gttctgatgc attaataaaa gcagccaaat agggccaaag agaaaaataa caggactctg 540
tactggacct aactttatca ttaattaggt aatattttcc tcatttcttt actgctgcca 600
ttttcctcac cagtattcca gagatgggtc tagctcatta ctctaccacc aagaacctaa 660
aaggaattag aatacagcag aattggcctc agtgaagagc ttaaaattgt tctcctcgta 720
gaactggact attgatcatt accacgtgac gttggctcta ttactttctg tccccaatgt 780
ccttctagtg gtttgaaaat gttaaaacat ccctaaaatc taaatcatat aatcagaatt 840
ctatagtgtc ccactctatc tgtaaagatc atttggaaga ctttagactc tattaatttt 900
aaaaggaata tttattagcc atatgcagaa tttctaataga tgatatttga cagcttctaa 960
ttcacttttc agatcagtggt ttgaaatggc aattatcagt gttggattta gttccaacta 1020
cttgattttac aaaaatgtac atttagagaa ggtaaaaaga aacagtgaga aatgtaaaaca 1080
ttcaaaatga taattgaatc tctcagttgt gggtaataatt atcagagaca tgcaactgaa 1140
aatgtctcac ctttcatctt tttttcttaa ttcataaagt tatctttagt aatttgatga 1200
gacctccta gtcattctca actggggcgg tgctgtcacc gaatgggtgt tgagagtgtt 1260
ggggctaggg cacatttttg gttgtcacag caactggggg ggcatttgct gcccagtgcc 1320
aggaatagta acattatgaa tgccagggac agtgtgctca gtaaaagtct ccattcaaaa 1380
ggggcagggc acgggtgctc acgctgttaa tcccagcact ttgggaggcc aagggtggcg 1440
gatcacctga tgtcaggggt tcgagaccag cctggccaac atgggtgaaac cctgttgcta 1500
ctaaaaatac aaaaattggc tgggtgtggt gtcacatgcc agtaacocca gctactaggg 1560
aggctgaggc aggagaatca cttgaacctg ggaggcagag gttgcagtga gctgagattg 1620
caccactaca ctccagcctg gatgacagag tgagacttca tctcaaa                                     1667

```

<210> 32
 <211> 249
 <212> DNA
 <213> homo sapiens

<400> 32

```

cgtggtaggc acttcatcag tgtttactga ttgaaaacat tgttgactgt ggcttctatc 60
agagtgtcta ctttttacag ctctgaccct acctcattta atttgctgct tttaatctac 120
gggggctgag aatttgtgaa accagtgttg ttagaagtgt atataatctg aatcaataag 180
ctctgaatgg gggacaagaa acgctcttat agcacaaaaga tgcattggact tcatgacagc 240
tcttttgggt                                     249

```

<210> 33
 <211> 1246

<212> DNA

<213> homo sapiens

<400> 33

```

aatggaaggt taattaccgg ggcccacctt gagacggaaa aaaattggga aaacgaaact 60
aaaaatgggt ggggtgaatt tctacccaaa gtccagccgt ggtggctgca ctggcacaga 120
atactaaact gagtgtgact attttcaatg caacaaatga aaaaacaaaa tgtgcctgtt 180
taaagcactc agtagagggc tgatgaaact aatTTTTTTT cctttaagac atgcactctt 240
gagtcctaca gtaactgagt gtttgttttag acagcacaaag aaggggtgag agtgcgtctc 300
ctagccttaa tgtgggaggg tagtttcagt cactcatcgg ctttcattat tgtgcagaaa 360
tattagaaaa cctcattgat caatTTTTatg tatttgaata tcagcaaatt gaaattttcc 420
ataattatca ttaatttgta accacatcca gtgtcatgct tactccttag agttcagatg 480
aattctttaa attaaaaaaa aactccatag tactaatttt gtttctttat atagtgtgcg 540
tttgatatta gtgcttgcaa ttgtattaaa gtcaaaagct gatttttatg gcatacacia 600
gaatgccact ttttctttta tttcatacca ataattttaa gattgatatg ctaaaaacia 660
tttgcacagc actaaagcat gagctacttt catctaaacc tgtaaaaaata tgaaagattt 720
ttatatTTTT tcactgggaa gaaattcttc ctggatgaaa ttacaaatat gtgtagaata 780
tattttaata aagacttata aaatacctaa ctacaggact taaaatatag attggcgctg 840
agtatataga acaatattcc atataaataa gtttagcctt tataaaaaatg aagttgcagg 900
ctgacattac attctgtact tactaagtgt caacagccct tacaacattt aaatgtaaat 960
ggtttcaaatt ggtcagcgtt gtttaaatgt aatcatgtta ttttattcat tgttaatgct 1020
ttgatgaaaa ggctttatat gcagtagatc tacgaaaata ttgttcatac tgatcagaat 1080
taaattttgta tagagcagag ttttaaaatg aatgtaaata gcactaaacg ttttctttct 1140
gcaacctgta cttacagatt cttcctgtaa actaaataaa aaaaaaatga tagtgcaaaa 1200
aaaaaaaaaa aaaaaaagag acggagagag gagaaagagg gcgtggg 1246

```

<210> 34

<211> 215

<212> DNA

<213> homo sapiens

<400> 34

```

gggaagcatt ttggatatga tgcaggaaat ctcttctctg agtcaaaaagt tcccaagagg 60
tgctgtatTT ttaagaaatg gagtttattt aaataatagt taagcttgtg cccatgttgg 120
ccgggcaact tttttcaatg gtgcttatta gaagaagtgt tttcatctg g tcaattttaag 180
gaaataaaac taggaaatgg agaggggggg agaga 215

```

<210> 35

<211> 734

<212> DNA

<213> homo sapiens

<400> 35

```

gctgccgggg gcctgggggt cggcgtcggg ccccggggga tgtggagagc tggcagcatg 60
tcggccgagc tgggagtcgg gtgctgcatg cgggcgggtg acgagcgcgt gcagcaggct 120
gtggcgcggc ggccgcggga tctcccagcc atccagcccc ggctagtggc ggtcagcaaa 180
accaaactcg cagacatggg gatcgaggcc tatggacatg ggcagcgcac ttttggcgag 240
aactacgttc aggaactgct agaaaaagca tcaaatccca aaattctgtc tttgtgtcct 300
gagatcaaatt ggcacttcat tggccaccta cagaaacaaa atgtcaacaa attgatggct 360
gtccccaatc tcttcatgct ggaaacagtg gattctgtga agttggcaga caaagtgaac 420
agttcctggc agagaaaagg ttctcctgaa aggttaaagg ttatgggtcca gattaacacc 480
agcggagaag agagtaaaca tggccttcca ccttcagaga ccatagccat cgtggagcac 540
ataaacgcca agtgccttaa cctggagttt gtggggctga tgaccatagg aagctttggg 600
catgatctta gtcaaggacc aaatccagac ttccagctgt tattgtcgct cccggaagag 660
actgtggtaa aaagctgaac atccctgctg aacaggttga gctgatcatg ggcattgtcc 720
tctgtaaaact gcaa 734

```

<210> 36

<211> 314

<212> DNA

<213> homo sapiens

<400> 36

```

gctgctgggg agccactgaa ccaaccggag acccgctggt cccacgtgaa gcagctgtcc 60
tggtgtggag gtacagagct agaccagcac tggtccctcc agccccctgg tagcctctgc 120
tgcaactgaa ctggcagctt ttgccgctgc ctttagctct gcatgtatgc gccctgaagg 180
ttctgcctct ctgtttttgga atcgccctcc cctcctcatg tttggggacc tgcaaggggtg 240
tgaggcacgt gagggcatcg ccattgcgtat ttacaggcc tctttctctg gactgtcttc 300
aaagggatga cttt                                     314

```

<210> 37

<211> 1839

<212> DNA

<213> homo sapiens

<400> 37

```

gcgggagcagg gcgaggaac agagcggccg ggagtaaggc ggagtgagag gaggagcttg 60
atggaagcgt gcgagaagg gcgtaactga tttggaaacc agaggaaagg cgctgttttc 120
accgaattag aatcgcgga aaatagagaa gaggttgttt gaaggctctg cgagatcgag 180
tgagtacggc tcgccaagtt ggagcgtctc cgcatagac acagcaacta ttcagctgcg 240
aggggacggg agaggtggtg agcactctcg cgagatttga aggagcggcg gaggccagag 300
ggaggagagg accggaagtc cttcatctca agcatccaat gctgaaacgg gcctgatttt 360
ctctaccgga agcccttttc cagaggtggt gaacacggcc cacctagcag gaagtccac 420
ctccttgagc tccgcaccc ttcccgaaagt ttttctgtca cctgtgttag gctccgtccc 480
ctttccgctg tttatcccc taccagaaaa ggatacattt agtgcctccc acccagctcc 540
actaaacggc cttcccgctt cctgtggttg tggccgctgt gctgtgggga gcggccccga 600
cccgggggct cattcgagcg acctcgacc acaatgccag catggacttt gcagaccttc 660
cagctctgtt tggggctacc ttgagccagg agggcctcca ggggttcctt gtggaggctc 720
accagacaa tgccctgcagc ccattgccc caccaccccc agccccggtc aatgggtcag 780
tctttattgc gctgcttcca agattgcact gcaactttga cctcaaggtc ctaaatgccc 840
agaaggctgg atatggtgcc gctgtagtac acaatgtgaa ttccaatgaa cttctgaaca 900
tggtgtggaa tagtgaggaa atccagcagc agatctggat cccgtctgta tttattgggg 960
agagaagctc cgagtacctg cgtgccctct ttgtctacga gaagggggct cgggtgcttc 1020
tggttccaga caataccttc cccttgggct attacctcat ccctttcaca gggattgtgg 1080
gactgctggt tttggccatg ggagcagtaa tgatagctcg ttgtatccag caccggaac 1140
ggctccagcg gaatcgactt accaaagagc aactgaaaca gattcctaca catgactatc 1200
agaagggaga ccagtatgat gtctgtgcca tttgctgga tgaatatgag gatggggaca 1260
agctgcgggt actccctgt gctcatgctt accacagccg ctgcgtggac ccctggctca 1320
ctcagaccgg gaagacctgc cccatttgca agcagcctgt tcatcggggt cctggggacg 1380
aagaccaaga ggaagaaact caagggcaag aggggggtga tgaaggggag ccaagggacc 1440
accctgcctc agaaaggacc ccacttttgg gttctagccc cactcttccc acctcctttg 1500
gttccttagc cccagctccc cttgttttcc ctgggccttc aacagatccc ccactgtccc 1560
ctccctcttc cccgtttatc ctggtctaat aacccccac acatacacct ctggtgacct 1620
atgtgcacag accgtcgtct tccctccagt cttctgaggg ataggggaca ttccatccca 1680
agcttctccc ttaccacac ctatcctttt gaggggcttt ggggtggggc tggggcaagc 1740
agagggactg ggtcttcact tcttgggcta ataaaattgt ttctttgtgg actaaaaaaa 1800
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa                                     1839

```

<210> 38

<211> 1931

<212> DNA

<213> homo sapiens

<400> 38

```

cagccgcccgc ccacccctct ttgtgtgctt tggaaagccg cggagctggt ggtggctaca 60
gttgggtgttg ggggcttagg cgagggacgt taccgggaag ttgcaggcgg gaggactctt 120
ccccatccag tcacctgaca ggtcacaaac atgtcagaca aaagtgaatt aaaggctgag 180
ttggaacgta agaagcagcg actggcccaa atcagagagg aaaagaagag aaaagaagaa 240
gaaaggaaaa aaaaagaaac agaccagaag aaggaagctg ttgtcctctg gcaagaagaa 300
tcagatcttg aaaaaaaaaa gagagaagct gaagcattgc ttcaaagcat ggggctaact 360
ccagaatccc ccattgtccc tctcctatg tctccatcct ccaaatctgt gagcactcca 420
agtgaagctg gaagccaaga ctctggagat ggcgcgctgg gatctagacg aggacctatt 480
aaacttgga tggctaaaaa cagcgaagtc gactttcctc ctogagaaat tgtcacgtat 540
acaaaggaaa ctcagactcc agttatggct caacccaaag aagatgaaga ggaagatgat 600

```

```

gatgtagtgg ctcctaaacc acctattgaa cctgaagaag agaaaacttt aaagaaagat 660
gaggaaaatg atagtaaagc tccccctcat gagctgactg aagaagaaaa gcaacaaatc 720
ttgcactctg aggaattttt aagtttcttt gaccattcta caagaattgt agaaagagct 780
ctttctgagc agattaacat cttctttgac tatagtggga gagatttggg agacaaagaa 840
ggagagattc aagcagggtgc taaactgtca ttaaactcgac aattttttga cgaacgttgg 900
tcaaagcadc ggggtggttag ttgtttggat tggatcatctc agtatccgga gttactcgtg 960
gcttctata acaacaatga agatgcccc catgagcctg atgggtgtggc ccttgtatgg1020
aatatgaaat acaaaaaaac taccacagag tatgtgtttc actgccagtc agctgtgatg1080
tctgccacat ttgcaaaatt tcatccaaat cttgttgttg gtggtacata ttcaggccaal140
attgtgcttt gggataaccg tagcaataaa agaactccag tgcaaagaac tccactgtcal200
gcagctgcac acacacaccc tgtatatgtt gtaaatgttg ttggaacaca aaatgctcac1260
aatctgatta gcatctctac tgatggaaaa atttgttcat ggagtctgga catgctttcc1320
catccacagg atagcatgga gttgggtcat aaacagtcaa aagcagtagc tgtgacatct1380
atgtccttcc ctgttgaggaga tgtcaacaac tttgttgttg ggagtgaaga aggttctgtg1440
tacacagcat gccgccatgg cagcaaagct ggaatcagtg agatgtttga ggggcatcaal1500
ggaccaatca ctggcatcca ttgtcatgca gctgttggag cagtagactt ctcacatctt1560
tttgtcactt catcgtttga ctggacagta aagcttttga caactaagaa taacaagcct1620
ttgtattcat ttgaagataa tgcagactat gtttatgatg ttatgtggtc acctaccac1680
ccagccctgt ttgcctgtgt ggatggcatg gggagattgg atttgtggaa tctcaataat1740
gacacagagg taccaactgc cagcatttct gtggagggtg atcctgctct taatcgtgtg1800
agatggaccc attctggaag gggaggtggt tgtggcgagg ttctgaagga caagttttgt1860
tattttgcga tgttgggagg agcagtttgt tgggtcccc aatgatggat tggcgacggt1920
tggccccgacc c

```

1931

<210> 39

<211> 294

<212> DNA

<213> homo sapiens

<400> 39

```

agttaccatt gcctttttctg tctcgtgccg gttttgggtt gctgaaacta gtccaaaaca 60
ggaaatttaa cagacagcca cagccaaaga gtgtcatgtg aattacaaga aatagagccc120
atthagggaa agatagaact agaaaggctt ttcattataa ttccatgttg aacaattgag180
tcatagcttc ttatcttgga ggaaggacac aattcaaagg ggcagtaagg attttgtaaa240
acgtggcadc cataatttac tatggagcaa gtgcccacat ctctaggaca ttaa

```

294

<210> 40

<211> 882

<212> DNA

<213> homo sapiens

<400> 40

```

tttttttttc tcattaacaa agcagtcaat tccctttatt tttaaaattt tatgtacaca 60
tatgaatgat ctgtataatg tacattcaat atagaaagct ttatatattt gatagtgtat120
agaacatttc acaattacac tcatctttta cataacatct tgacatccat ttttaaattt180
ttttgcacaa gctccttttc attcaatttg gtaaagccag ttatacatatc taatgtgtac240
tgtgagcttt cagaaggtta atgattgagg atgccagtga aggggtgcagg gacaaaacct300
aatagtcttg gatgggtggg ggaggatggc cacgcagact tgatgcagga gagggaaata360
ttctttcctg gggaaaagtg acttagccca atttttgttg actgtagctc aaccctacag420
tcatgtctagt tcaaaaaaaaa aattacaaaa actaggaaga aagttttgtc tttttgattc480
acagttttgt aaacagatat aaaggaacaa atgtgcttac atacaccaag aaaaaaaaaa540
ttcttgtgta ccactttatg ttgatccaca gagtgccttc ttataatgtg atacaattag600
gatcactgac tttttttcct aaaaatatat ttatagaaaa aggaataaca ctgtcatgaa660
accaggagaa aggcagtaag agtttgcttc aacgtatcag ctggagggaat gtggacttgg720
cactggcctt tcagcgttta ttgtctctcg tgaatatctc aagtctgata gccaaaggtcg780
cctgcctcat ggtctacagg aggtggcagg ttagacatga ctgatgtaga tgtactgcgg840
taaggtagcc agcaactcca ggtcctgctt cagagagcta ca

```

882

<210> 41

<400> 41

000

<210> 42

<400> 42
000

<210> 43
<211> 934
<212> DNA
<213> homo sapiens

<400> 43

```
ctcgcgcgcg acacagggag cagcgagcac gcgtttcccg caacccgata ccatcggaca 60
ggattttctcc gcctcagccc aacggggagg gctagtgtga catagtgtatt tagatgaaag120
agctattgaa gctttaaaag aattcaatga agacggtgca ttggcagttc ttcaacagtt180
taaagacagt gatctctctc atgttcagaa caaaagtgcc tttttatgtg gagtcatgaa240
gacttacagg cagagagaaa aacaagggac caaagtagca gattctagta aaggaccaga300
tgaggcaaaa attaaggcac tcttggaag aacaggctac acacttgatg tgaccactgg360
acagaggaag tatggaggac cacctccaga ttccgtttat tcaggtcagc agccttctgt420
tggcactgag atattttgtg gaaagatccc aagagatcta tttgaggatg aacttgttcc480
attattttgag aaagctggac ctatatggga tcttcgtcta atgatggatc cactcactgg540
tctcaataga gggttatgct ttgtcacttt ttgtacaaaa gaagcagctc aggaggctgt600
taaactgtat aataatcatg aaattcgttc tggaaaacat attggtgtct gcattctcagt660
tgccaacaat aggctttttg tgggctctat tcctaagagt aaaaccaagg aacagattct720
tgaagaattt agcaaagtaa cagaggggtc tacagacgtc attttatacc accaaccgga780
tgacaagaaa aaaaacagag gcttttgctt tcttgaatat gaagatcaca aaacagctgc840
ccaggcaagg cgtagggttaa ttgagtggta aagtcaagg ctggggggaa tgttggaaact900
gtttgaattg ggggtgttcc gcttaggaag gttc 934
```

<210> 44
<211> 231
<212> DNA
<213> homo sapiens

<400> 44

```
ctcgtgcgcg tcaattatga gttcctttat ttattgggtga gaaagattag caagtatgac 60
gtatgcaagg aatagaagtt atgtaccgag tgggttaaagg ttggggggat atggagatgg120
atgagaggga gctgtctggg aaggctttgc ttcacttggg ttagagtagg gttgcgtgag180
gaaatagggt tgtagaatga gaatgagggt catgacagcc tcctacaaaa c 231
```

<210> 45
<400> 45
000

<210> 46
<211> 240
<212> DNA
<213> homo sapiens

<400> 46

```
cgatcacgtt ttcacatgat gctcacgtc agggcgcttc aattatccct cccacaaaag 60
ataggtggcg cgtgtttcag ggtctctcgt ctctctccta cagaaaagaa aaagaaaaaa120
atgtcattag aagaggcgta acacgtcagt ccgtccccag gtttgtgtt cctggagtgg180
ccgaaagaga tcagttctaa cctgctctgc aggaataacg gtcctgcctc ccgacactct240
```

<210> 47
<211> 228
<212> DNA
<213> homo sapiens

<400> 47

```
agagcagatc agaggcaggg ggaaaagcac gcagagggag gagctgaaga gctgagaccc 60
ggagccaggg acagcttaat gaagacaaac tgaaggggaa actgagatgc ttagaaagcc120
cagctataca actctacca gaaatacttc ccttagggaa tgtaaaaagt actactggag180
```

atggaagagc agaaaaacag ctatgggcag aaggccaagg ggtgatag

228

<210> 48

<211> 1229

<212> DNA

<213> homo sapiens

<400> 48

```

aaaaaaaaa aaaaaagagt taatctagga gataatgaat ggcctagtac tagataatat 60
atggcccccac aagctcttga cttctgtcct tggggaaaagc catttttgta accacactag 120
tgagatcttac atgatgctta atggagaaca gagaagatct tgttgcaaaa ggtgtattaa 180
atatttgtgc tgtttctgta tgagattgag aagcttttcc cacctctcac ccctatttcc 240
tataaggata tccagagaag ccaaactgtt ctgtgggttt gggaatgggc atttcccggg 300
aaaatgcac tggatcgatg actaaacctg gcccttttct ctgggctgta gtgaagccgc 360
attttcacgc tggctggcag tgtgctgaga gcctcgaatg ctctgcggcg tagtgccctt 420
ctgccctgcc tgacgatgta tcgaaaagat gagagtgaag gagactttgt gcagcaggaa 480
acgggtaggt gaggtgttgg gcagttgtgg gaacttctga gagtattaca gagtggtaga 540
atcggtaaga actctgattt ggacttcgct ttggtggaac tgtgtgccta tacctgcctg 600
tgtgtgtgca agtgtgcagg ttcccttgta tgtatgtgta cgtgtgggaa cctgtgtttg 660
tcataattttt cttcatttca caaaggcttt ttttgaagca gtggcagtat gcctttgttt 720
caagaacaca tgaaattctt ttaacaccag attagtgtgt taccctaaat gaacggttct 780
agccctctat taagaaataa agggaccata agcatttttg ctgcttattg ctgtgtgtta 840
ctacttacaa gagtcttgaa aattatacag aactttgcct tcttttttta atgtcttcca 900
caatgttgtg actgattata accctgtttc ccctcagaga agagctatgg ctcagggatc 960
tgtgttgact ctggcattta gtggctttgt gaaggaaaga aaccattaaa tgacctgaca 1020
aaaactgact catgtcttta aagtagttga agccactttt aggaatgtta ctctcggttg 1080
cttttgtcta attctaattg gcttaaagcc aagaaaacca tagtataaat cttttttgtg 1140
taccctatgg ctagtgtttt aaatgggcag ttccgttgtg gataaagtat ccagtcactt 1200
caggtttccg tgggaaggtt ttattggggg

```

1229

<210> 49

<400> 49

000

<210> 50

<211> 231

<212> DNA

<213> homo sapiens

<400> 50

```

gaggccggga gtggaacccc ctcttttgag aaggttgcct gactcagaga cacagaaacg 60
ggtccaggga tggggagaga tgtggagtga ggggaaggtt gcatttgaga aagggaagttc 120
gagaacacac tgggacattg taacacattt gaaccatctt ctgatagaaa ggtgttggcc 180
tcctaataat gggaggtcag ggccagggtc tcgggcacag ggagagggtc c 231

```

<210> 51

<211> 1340

<212> DNA

<213> homo sapiens

<400> 51

```

tttggcatca tttacaattt catagaatta ctgtgaaggc ctttctagtt gagatgttgg 60
ggtatttggg attctaattg ttaaccccag aagaaggtaa tttagcttgt atttatatta 120
aaccatttta gccttttact tatatctggg agaattccag tgatcatcct aataaggat 180
atttcagaat aatttttttt tccttcagaa taacttagaa tcagatgcta taagggtctc 240
taggagcagt gtgaaatttc cgtaaagata aatttgaatg ttgtaaccaa gtttatatta 300
aaccaagagg ccatttccaa tatgattttt tgtttctttt taacttgta agtccctaag 360
agattacatg ctagggtttg agtcatttct attgtagata atgatggccc acacagtcac 420
cttcaactat ccacataagc taggcttttc gcttttgcca cggacagtgt gaccaagata 480
tttccagagt aaataaccca ccacaacctt ggtaattcct cttttcttct taagctccag 540
gaagcgaaag cagaaggact cttttcagac tgccctctgt agcctacatt gcagctttcc 600
aaaacaggca gctagcactg ggaaagccca tgtggtgacc ccataatttt ctgaggttct 660

```

```

tctttttccat ggtgttactt tattatcaga aagtaaattc agaaaacagg tcttgccctt 720
agcagacaag aaccacacca gtttcttgta aaggtaacgg atacattggg attcaggagt 780
gacacagagg tccagcccca gaacttgtaa ggattttggt tgaacactga gcagatgcct 840
cctccctgcc acccatcaca ctagttaggg ctggccatga attctatgcc agagtcactc 900
ctgcagtctg ctagggatgg gccttcttat cccactctcg cacacatccc agtctagtct 960
ttgccttcac agagtccctc ttgacacccc tgacttaatg atagttgctg ttttggagta1020
gaattgatca ggtttaagtc atcctgctca ggttgggcat agtggctcat gcctgtaatc1080
tcagcacttt gggaagccaa agtgggagga ttgcttgagc ccaggagtcc caaaccatcc1140
tgggcaacag agggagaccc tgtctctacc aagaaaaaaa aaaaaaaaaa aaagttaaaa1200
aaacaattag ctggacctgg tggtagcacac tcagtaggct gaggtgaaag gattccttta1260
acatgggaga ctgaagatgc agtgagccat gaatcagcaa ctgcacacca gtatgagaga1320
aaaagtggaa ccctatcaca                                     1340

```

<210> 52
 <211> 226
 <212> DNA
 <213> homo sapiens

<400> 52

```

gccagatttc cgggggttttg cgggccccgc gatgttttcc agaggtttcc aagtgggaag 60
aggagagcga caaggtgaaa atgccccgtg cgggggcgtc cagcggagtc ctgccagctg120
tccggcgggtg ggggtggacgt ctgatttatg aagggtgcca tccacctatc tgagtacctg180
acttgtgagg actgacaact acagcatcag gtacaaagtt gttctt                                     226

```

<210> 53
 <211> 611
 <212> DNA
 <213> homo sapiens

<400> 53

```

gcagctgcag cggcagcagc ggcagcagag gcagcagcag tagccaccac tccgccgagg 60
ccgcaacccc ggctcggcct ccccaggccc cgccgctgcc gcagtcattg ctgctgatgg120
ggtggacgaa cgctcgccct tgctgtcagc atcccactcc ggaaatgtca ctcccaccgc180
cccaccgtac ttgcaagaaa gcagccccag agcggagtc caccctcata tacagccatt240
gccagtccag acgccagtgg tattccagta ataaactgcc gtgtgtgcca atcactaatc300
aatttggtat gcaagcttca ccagcatgtg gttaagtga cagtttgcaa tgaagctacg360
ccaatcaaaa acccccacac aggcaagaaa tatgttagat gcccttgtaa ttgtcttctc420
atgtgtaagg acacatctcg gcgaatagga tgcccaagac ccaactgtag acggataatt480
aaccttggcc cagtaatgct tatttctgaa ggaacaacca gctcagcctg cattgcccac540
tcccaccag aagggtacaa gggtcgtgtg ttggggcagc gttgggggaa acattccctt600
tgggatggga c                                     611

```

<210> 54
 <211> 689
 <212> DNA
 <213> homo sapiens

<400> 54

```

gccgaccgga cgcagggggc tggcgggaac gtgaagctcc gcggtgcctg atggggccgt 60
tggggcgccg gtagctgttg ctgttggggg accccctcat tccgtccgct gccgtccctg120
ctgcctcatg gcggccatcg gatttcacct gggctgcacc tcagcctgtg tggccgtcta180
taagtagtgc cgggctgggt tgggtgcaaa tgatgcccgt gaccgagtta ctccagctgt240
tggtgtctac tcagaaaatg aagagattgt tggattggca gcaaaaacaa gtagaataag300
aaatatttca aatacagtaa tgaaagtaaa gcagatcctg ggcagaagct ccagtgatcc360
acaagctcag aaatacatcg cggaaagtaa atgttttagtc attgaaaaaa atgggaaatt420
acgatatgaa atagatactg gagaagaaac aaaatttgtt aaccagaaag atgttgccag480
actgatattt agtaaaatga aagaaacggc acattctgta ttgggctcag atgcaaatga540
tgtagttatt actgtcccgt ttgatttttg agaaaagcaa aaaaatgctc ttggagaagc600
agctagagct gctggattta atgttttgcg attaatcac gaaccgtctg cagctcttct660
tgcttatgga gttggacaag actccccta                                     689

```

<210> 55

<211> 560
 <212> DNA
 <213> homo sapiens

<400> 55

```

agaaaatgga cgctgacatc aatgtcacaa aagcggatgt tgaaaaggcc cgacaacaag 60
ctcaaatacg tcaccaaagt gcagaggaca gcaaagcaga ttactcatcc attctccaga120
aattcaacca tgagcagcat gaattattacc atactcacat cccaacatc ttccagaaaa180
tacaagagag cggaggaaaag gaggattgtg agaatgggag agtccatgaa gacatatgca240
gaggttgatc ggcaggtgat cccaatcatt gggaaagtgc tggaatggaat agtaaaagca300
gccgaatcaa ttgatcagaa aaatgattca cagctggtaa tagaagctta taaatcaggg360
tttgagcctc ctggagacat tgaatttgag gattacactc agccaatgaa gcgcactgtg420
tcagataaca gccttttcaa ttccagagga gaaggcaaac cagacctcaa atttggtggc480
aaatccaaag gaaagtattg gccgttcac taaaaaaaata agcttatgtc ccttttaacg540
gggggccccat tcagcttcag                                     560

```

<210> 56
 <211> 851
 <212> DNA
 <213> homo sapiens

<400> 56

```

gaagaagagt aagaaggaca agaaggccaa agctggtctg gagagcgggg ccgagcctgg 60
agatggggac agtgatacca ccagcaaaag aggtagaatt ggtttctgag tagtgaaggc120
cacttgaagc tggaggagaa actaaagcct tattgagaaa acatgttata gatccttttg180
ttgctgagag agtggaaacat aggtcctaga caggggtgaag agttctggca catttttagct240
gctactttga gacctcgggt atgttacctg gtgtggtcat cccatcttgt cctgttttaa300
ggatatgggt ggtgaaagat gaaagaggca gagtttatcc caatgacttc tctgtttgag360
ttgggaagcc tcaccttcag acccagtaac tgtccgcagc tgtctgctag tggttgtctt420
aacatcgtag tcctagtttg cattttttta atccccctctg tttaaaagggt ttgtaaaaca480
aaaacaaaaa actaagtctg ctcaagtcaa tgctgtagaa ccctaaataa gtggtagaag540
agtgtcactg aattttgtct ctgaattcag tataactgag ttttgtccat gctggtgtct600
gggttatagg cctgatgggc ctggtagttt tccatcttgt tctggcctag aggtcagtc660
tttgacattc ctcaaagctt gtgtacagtg ctcacctaaa tccatctgac tacttgttcc720
tgtgcctct tgttttaggc ctcgtttact tttaaaaaat gaaattgttc attgtgtgga780
gaagaatgtt gtaattttta cttattaaag tcaacttggt aagtttttaa aaaaaaaaaa840
aaaaaaaaaa a                                     851

```

<210> 57
 <211> 1354
 <212> DNA
 <213> homo sapiens

<400> 57

```

cttaccaca gcctttctgc taagttctgt tttttggata tttatgactt ggttcattctt 60
attttttctt gatttagcag gagcccttt ctatttcagt ttcattttca gcatagtagc 120
ctttctatac tttttctata agacttgggc aactgatcca ggcttcacta aggccttctga 180
agaagaaaag aaagtgaata tcatcaccct tgcagaaact ggctctctgg acttcagAAC 240
attttgtaca tcatgtctta taaggaagcc attaagggtca ctccactgcc atgtatgcaa 300
ctgctgtgtg gctcgatatg atcaacactg cctgtggact ggacgggtgca taggttttgg 360
caacctcac tattcatat tcttcttgtt ttctctttcc atggtatgtg gctggattat 420
atatggatct ttcattctatt tgtccagtc ttgtgccaca acattcaaag aagatggatt 480
atggacttac ctcaatcaga ttgtggcctg tcccccttgg gttttatata tcttgatgct 540
agcaactttc cattttctcat ggtcaacatt tttattatta aatcaactct ttcagattgc 600
ctttctgggc ctgacctccc atgagagaat cagcctgcag aagcagagca agcatatgaa 660
acagacgttg tccctcagga agacaccata caatcttggg ttcattgcaga acctggcaga 720
ttctcttcag tgtggctgtg ttggcttggt gaagcctgtg gtggttagatt ggacatcaca 780
gtacaccatg gtcttttcacc cagccaggga gaaggttctt cgctcagtat gaagaaaagc 840
aaccctaaac tctcaatctg atttgttttt gtttatgtcg atgccctgta gtttgaaagt 900
gaagtaaaga tttagaattc acctaaagtc aaaggaaaac acgtggtttt taaagccatt 960
aggtaaaaaa agttctcaat aaaggcatta caatttttta ggttttagaaa gatggacttt1020
tctgataaat cttggcagac atctaaaaaa aaaaccatat ttttcacaag aaatgcaag1080

```



```

ttactttttt  tggaaataat  actcactgat  tatggataaa  atggaatatt  ttcagatact1140
atattggctg  tttcaaaata  gtactattct  ttaaacttgt  aatttttgct  aagttatttg1200
tctttgttgt  atctataaat  atgtaaaaaa  tatttaaata  gatgtacctg  ttttgctttc1260
acacttaata  aaaaattttt  ttttgtaaaa  ggaaaaaaa  aagaagagga  aaaagaagag1320
aaaggagagg  ggaagaaaga  ggagaaggca  agga

```

1354

<210> 58

<211> 268

<212> DNA

<213> homo sapiens

<400> 58

```

cgtgatctct  cctcagtaaa  accaagggtgc  atttttctgg  acccacctat  cttgggggtg 60
attaggagta  gaggggttga  aataacttaaa  atttttttcc  tttctgatat  aattattgat120
ctccttctag  aagtcctgtc  gtctttgtctg  gagaattttt  atttaagcat  cctttttagt180
aagaatctct  aatgtccttt  tttcatccag  atctacactt  gatgaatcct  aaagctat1240
ctacacagtt  cctttattca  gttttccc

```

268

<210> 59

<211> 752

<212> DNA

<213> homo sapiens

<400> 59

```

tgacaaaaga  aatggaataa  tttcaaaaaa  gttaagtcct  gagaagacaa  ccctgaaatc 60
tattttgaaa  agaaaaggca  ccagtgatat  cagtgatgaa  tctgatgaca  ttgaaatttc120
ttccaagtca  agagtaagaa  agagagctag  ttcattgagg  tttaagagaa  taaaagaaac180
caaaaaagaa  cttcacaatt  ctcccaaaac  aatgaacaaa  acaaaccaag  tgtatgcagc240
aaatgaggat  cataactctc  agtttattga  tgattattca  tcttcagatg  agagtttata300
cgtcagccac  ttcagtttct  ctaaacagag  ccacagacca  agaactataa  gagacagaac360
tagtttttct  tcaaaattgc  ctagccataa  taagaaaaat  agcactttta  ttccaagaaa420
accaatgaaa  tgttcaaatt  aggaaagtgt  ttaatcaaga  gcagtcgtat  gaatcaatgg480
ataaattttt  agatggcggt  caggaagtgg  cttatattca  ctcaaaccag  aatgtaattg540
gatcgagcaa  agctgaaaat  cacatgagcc  gatgggcagc  acatgacgta  tttgagttga600
agcagttttc  acagctgaca  gctaacatag  ctgtttgcag  ttctaagaca  tataaagaaa660
aagtggatgc  agatacattg  ccacacacaa  agaaaggcca  gcaaccgagt  gaaggcagca720
tttcacttcc  tctttacatt  tcaaatcctg  ta

```

752

<210> 60

<211> 1389

<212> DNA

<213> homo sapiens

<400> 60

```

gaactccaag  ttagtggatt  gcagaatgga  aacttggctt  ttgcggcact  ggggtgagttt 60
tagtttgtgt  gtgtcttgct  ggggggtggt  gatgattgtc  tcagcactca  cgcactgcac 120
aagatggcag  caggatacag  cactgcacaa  gatggcagct  cctctgcagc  ttcctcctca 180
gcctccctcc  ttgcaccccc  acaggtttgg  cttgtggttt  ttgtcatcag  taacctactg 240
cctgagatca  tgatctctta  aaagatgaga  ctctcggaag  ggttgattgt  atgcgtcagt 300
gagccttcta  tcaccttctg  gaacaaagtc  acttgaaaatc  tcttgatgag  attaaggagt 360
ttagtgttac  taagaaaatc  tgctttgggc  cgcagcagtg  ctgggtgttc  tcagacctga 420
ctgaggaagt  tagctgcggg  ctgcccgtgt  ggctgggtgt  tcaggaggaa  tccagagaag 480
tgttcagatg  cccccccttg  gctcctttct  aattttaatc  agctctttta  atagctgccc 540
atctcctgtg  attgcacaac  caagcacttt  gacatttgca  ccttaggaga  ggcagatgtt 600
aaaatggaat  ccaaagacca  cctagggcgg  ggctgggtgg  gagatgggag  ggccaactgc 660
gagctgctcc  acttctcagc  tctcccttgc  cctgcagccc  tgggccagac  aaggccagaa 720
ggtttcaggg  gcatttgaca  tcccctcctg  gttctcacca  ggaaaaacatc  caaagctttg 780
gaggaacacg  gccctgcccc  tggctcctta  atgtcccctg  ctctttgtta  actgatattc 840
agcgagcaat  gcctaagact  ttgttaagta  catttctact  gcttttcttt  ctgcttcaa 900
cacacagttc  gtctctgagg  aaagtaaaat  aaatggaata  agagtaaatt  gggtaaggag 960
atatccaaag  ctaccagtc  ccttgaccca  gcacagttgg  ccgacccgtg  tcaactccctg1020
gctgtcgtctg  cttctctgtg  ctactgaag  ggtgagccag  gccagtgtt  cccagcccc1080

```

```

tgggcctggg cactacacag tggaaaacag acaagcggcc ccttccccc atcccaagag1140
tgtcttgctg cttgggtgggt gctcatcgca atgttctgaa ggctccaggg ccactttgtt1200
tgtaagtatg atctgggcct caaaatacca tagtagctgc ttgataaaat tctaaaaata1260
tctggttctc tattatgtaa acactattac agtcaccagt gtgtgaagac tcttgagtct1320
ggttctcata tcagagtcac catttttctt cctgtggaat aaaatgcctt gtggacttcc1380
caaaaaaaaaa
1389

```

<210> 61

<211> 726

<212> DNA

<213> homo sapiens

<400> 61

```

cgtatctgtc cggacggaag caggaagcgg gagcgtagg gccacgcctg cggcgctgct 60
ggttgaggct gtgtgggtgg gggacgggccc gaggcgatgg cggagaagtt tgaccaccta120
gaggagcacc tggagaagtt cgtggagaac attcggcagc tcggcatcat cgtcagtgac180
ttccagccca gcagccaggc cgggctcaac caaaagctga attttattgt tactggctta240
caggatattg acaagtgcag acagcagctt catgatatta ctgtaccgtt agaagttttt300
gaatatatag atcaagggtc aaatccccag ctctacacca aagagtgcct ggagagggct360
ctagctaaaa atgagcaagt taaaggcaag atcgacacca tgaagaaatt taaaagcctg420
ttgattcaag aactttctaa agtatttccg gaagacatgg ctaagtatcg aagcatccgg480
ggggaggatc acccgccttc ttaaccagct caccctccct gtgtgaagat ccccggggac540
tgcatgcgg cgtgaggctg ggactgcgag tgctgacgcc accttctctg tgaggtggga600
ctgggccctg gacacacccc tcagcccctc tgctctcatt gtttggcctc atggggaccga660
ggggctggag gagaggcgga gtgtgcccac gggttcaaga ggttggttgg ggtgaaatgg720
gtttgt
726

```

<210> 62

<211> 681

<212> DNA

<213> homo sapiens

<400> 62

```

ggctgagaaa aatgggggga gacataacac ccacgaatga aaatacagat ttaagagaag 60
gaaccagtaa agtaggagac agatgtgaag gaaatggaaa tgaggcaaga ggacattgga120
agagagaagt ttgctgtcca ggagccaggt ctggagcatc agtgtgaggg agttcaggta180
ggctgggcct gtgcctctag gtagggacaa gggaggctgg gtagccaggg ctggtgctta240
aaacccctga ggccatgagc tcattggctg cctttgtagc atcctgtctt cttctgtgct300
gcctggtttg atctcatctc acctggattc aaagggttaag gtgggcatgg gtcttgggcc360
tgacacccac caaggatgac ctgtggactg ccatcgatg ctgaacaggg agatgaaagg420
aggtcctctt accatacccc tctgcccaacc cccagtagg ccactgttct gactttgttt480
ccagaatate cagaaatcca aaggggctgt tgctgaacag tctgcaggac cagtgcagc540
acctacttgt tgtcccaagg catacaaagg aggcctcaac gctcatgctt ctctaataca600
gccctaccaa gacacacaga aaaggaaggg gtagaggaga aggttgaagc tgtggagtta660
gactctgctt cattcctgaa g
681

```

<210> 63

<211> 1116

<212> DNA

<213> homo sapiens

<400> 63

```

gggccacact gagcagattc tttggtagaa ttttcaactt gagactaaca caagtatttc 60
cttttctggt cagttctcca aatgacaaga agtctttttg ctcaattgaa ggggaattgga 120
atggtgtgat tatgcaaaa tatgcaacag gggaaaatac agtctttgta gataccaaga 180
agttgcctat aatcaagaag aaagtgagga agttggaaga tcagaacgag tatgaatccc 240
gcagcctttg gaaggatgtc actttcaact taaaaatcag agacattgat gcagcaactg 300
aagcaaagca caggcttgaa gaaagacaaa gagcagaagc ccgagaaagg aaggagaagg 360
aaattcagtg ggagacaagg ttatttcatg aagatggaga atgctgggtt tatgatgaac 420
cattactgaa acgtcttggg gctgccaaagc attaggttgg aagatgcaaa gtttataacct 480
gatgatcagg gcagtaggca taattcagca acaaacatc ttcctttggg agaaacctgt 540
tcattccaat cttctaatta cagtgggttc tatctcaggg atactggact ttctgacgca 600

```

```

gatgaacaat taaggggaaa agcttccctt ttccctctgt ggcagttacg attttgactt 660
cagtcctgag aaaaacttca ggttttgaaa atcagatgat gtcttctcct tttccaaaca 720
ccacacgttg aaagcattta taaatccaag tctgaaactc tgcgctctag tactgctgtt 780
aagatacaca acttgtttct tagttcatat aatctcgggg acacacatac gtatacacac 840
acatacatat atataaatat acctgatgcc agattttttt cataaatatt ctgcctactg 900
taaataatggg ttccctctgag ttgttttaga aaattagcgc aatgtattaa aatcaagtgt 960
taggaaattt catggtctta cctacaataa cttttatatt ggaattgaac tattattaaa1020
ttgtatctaa tcctggaata cagttaatt aattattcct agtgcttaag gcttcataaa1080
gtaatttttc caaccttttt tttaaaaaaa aaaaaa 1116

```

<210> 64

<400> 64

000

<210> 65

<211> 806

<212> DNA

<213> homo sapiens

<400> 65

```

tccaagggct ctttagtcct tctaagccc cacagtaact tcccgtagtc ctgaggcttg 60
ggacctcctg gggttcttac ctccctccc cattgctgag acagtctgag aagaggctta120
ggaatttgtc tgtgggagtt tattcatctg tctctcctat ttacctctcc caaaccagga180
tttccacttc tcaaacctgc tgtgatctca caactggagg gaggaagtga gctggggggc240
tcatctccac tggctgcagg aacaggcctc cagggctccc agactgatat tcagactgac300
aatgatttga caaaggaaat gtatgaagga aaagagaatg tatcatttga acttcaaaga360
gacttttccc aggaaacaga cttttcagaa gcctctcttc tagagaaaca acaggaagtc420
cactcagcag gaaatataaa gaaggagaag agcaacacca ttgatggaac agtgaaagat480
gagacaagcc ccgtggagga gtgttttttt agtcaaagtt caaactcata tcagtgtcat540
accatcactg gagagcagcc ctctgggtgt acaggattgg ggaaatccat cagctttgat600
acaaaactcg tgaagcatga aataattaat tctgaggaaa gacctttcaa atgtgaagaa660
ttagtagagc cttttaggtg tgactctcaa cttattcaac catcaagaga acaacactga720
ggaaaagcct tatcagtggt cggagtgtgg caaagctttc agcattaatg agaaattaat780
ttggcatcag agacttcaca gtggggg 806

```

<210> 66

<400> 66

000

<210> 67

<211> 226

<212> DNA

<213> homo sapiens

<400> 67

```

gcggatccgg cgttctgcac tgatcttttc caaggggtga cagagatggc ggcggggtttt 60
cggaaggcgg gtaagtcccg gcagcgggaa cacagagagc gaagccagtg actaccgtaa120
aaaacaaggt acctcaaagg tggtcggaag aagggtgttg aaaaaaatcc agtgagttct180
actacaaaat gactcggggt aaactccagg gtgggggtaca aattat 226

```

<210> 68

<400> 68

000

<210> 69

<211> 2042

<212> DNA

<213> homo sapiens

<400> 69

```

gcagccgtcg ccttcggagc gaaggggtacc agcccggcag aagctcggag ctctcgggggt 60
atcgaggagg caggcccgcg ggcgcacggg cgagcgggcc gggagccgga gcggcggagg 120

```

```

agccggcagc agcgggcgagg cgggctccag gcgaggcggt cgacgctcct gaaaacttgc 180
gcgcgcgctc gcgccactgc gcccggagcg atgaagatgg tcgcgcctcg gacgcgggtc 240
tactccaaca gctgctgctt gtgctgccat gtccgcaccg gcaccatcct gctcggcgctc 300
tggtatctga tcatcaatgc tgtggtactg ttgattttat tgagtgcctt ggctgatccg 360
gatcagtata acttttcaag ttctgaactg ggaggtgact ttgagttcat ggatgatgcc 420
aacatgtgca ttgccattgc gattttctctt ctcatgatcc tgatatgtgc tatggctact 480
tacggagcgt acaagcaacg cgcagctgga tcatccatt cttctgttac cagatctttg 540
actttgccct gaacatgttg gttgcaatca ctgtgcttat ttatccaaac tccattcagg 600
aatacatacg gcaactgcct cctaattttc cctacagaga tgatgtcatg tcagtgaatc 660
ctacctgttt ggtccttatt attctctgtt ttattagcat tatcttgact tttaagggtt 720
acttgattag ctgtgttttg aactgctacc gatacatcaa tggtaggaac tcctctgatg 780
tcctggttta tgttaccagc aatgacacta cgggtgctgct acccccgtat gatgatgcca 840
ctgtgaatgg tgctgccaag gagccaccgc caccttacgt gtctgcctaa gccttcaagt 900
ggcgagggtg agggcagcag cttgactttg cagacatctg agcaatagtt ctgttatttc 960
acttttgcca tgagcctctc tgagcttgtt tgttgctgaa atgctacttt ttaaaattta1020
gatgttagat tgaaaactgt agttttcaac atatgctttg ctagaacact gtgatagatt1080
aactgtagaa ttcttcctgt acgattgggg atataacggg cttcactaac cttccctagg1140
cattgaaact tcccccaaat ctgatggacc tagaagtctg cttttgtacc tgctggggccc1200
caaagttggg catttttctc tctgttccct ctcttttgaa aatgtaaaat aaaacaaaa1260
atagacaact ttttcttcag ccattccagc atagagaaca aaaccttatg gaaacaggaa1320
tgtcaattgt gtaatcattg ttctaattag gtaaatagaa gtccttatgt atgtgttaca1380
agaatttccc ccacaacatc ctttatgact gaagttcaat gacagtttgt gtttgggtgt1440
aaaggatttt ctccatggcc tgaattaaga ccattagaaa gcaccaggcc gtgggagcag1500
tgaccatctg ctgactgttc ttgtggatct tgtgtccagg gacatggggg gatgcctc1560
gtatgtgtta gaggggtgaa tggatgtgtt tggcgctgca tgggatctgg tgccctcttt1620
ctcctggatt cacatcccca cccagggcc agttttacta agtgttctgc cctagattgg1680
ttcaaggagg tcatccaact gactttatca agtgggaattg ggatataatt gatatacttc1740
tgcctaacaa catggaaaag ggttttcttt tccctgcaag ctacatccta ctgctttgaa1800
cttccaagta tgtctagtca ctttttaaaa tgtaaacatt ttcagaaaaa tgaggattgc1860
cttccttgta tgcgcttttt accttgacta cctgaattgc aagggatttt tatatattca1920
tatgttacaa agtcagcaac tctcctgttg gttcattatt gaatgtgctg taaattaagt1980
cgtttgcaat taaaacaagg tttgcccaca tccaaaaaaa aaaaaaaaaa aaaatggtgg2040
cg
2042

```

<210> 70

<400> 70

000

<210> 71

<400> 71

000

<210> 72

<211> 2980

<212> DNA

<213> homo sapiens

<400> 72

```

agcagagtta gccagaaatg cctcctgctg cccagcctt agagagctcc catctcaatc 60
attgagcctg aaggcttcaa gcccaagaat gcaacaagac cccagccta catttctcag 120
ctccccctgga gccagctgat cctgtaacgc tgctggaggt cagtctgagc taccaagact 180
gtcccttagac aaagggtggag tccccacac tgcccaagac caaatccctc actcaacctg 240
ctgaggtgtg gatggggaaa cagaggcaaa actgaggcac ctgatgcatt cagcctgctg 300
tgacagcagt ccattgactg cctgatgtt cagagagaaa cgcacacaag gtttgccat 360
gagaattggg gagcagatgg ccaagcagat aggtttatgtc tgttttctga gtgatgaagt 420
caggaagccc tgtggctctg gaggccactt gtggttcatt cttttcccat atccttggtc 480
tttagaaaatg gttaccttca ggacagtgca gctgcattta tcagagcact attgctaagt 540
tttcttttct ggcttgtgtt tttctgggac agtttagaat tgggaggcct attctcatag 600
aacaccaaaa atgatgttca gtgattcatt taacatacac caatgtactc tggctgctgg 660
ggggacaacc ataagcaaga catgcccagg gtttgccgtg gctccagatc tactccctgt 720
aggagttaa ggatcacaca aacggtagta accagggttg tgaatctgag tacaccctgg 780
caaggcttct cttcagactg aagcagcaat tctgccacta ccagcagcaa ccaggacgtc 840
tgttctttgt gggggccaga tcagaagaga gagggccctg tgacgcccgg gctgcttgg 900
cacaactctg tccaattcaa ggatgtttat cggcctctct tagatcctga gtgagacaaa 960

```

```

tacagaaatg acccattccc tgcccaccag aaactcagag gtgattgggg agactgacac1020
aggaaaaatga actttaatcaa gagagactgt gatatgtgct aagaagggtg tgagggagggt1080
agagatgaat tttccctgga gggatcctag aaagcattgt catattgcca tctccattag1140
ctcacttttta aacaactagg gtgctggaag aacctttgtc tgagggtagt tcatagctgg1200
aaatacttgg aatattttcc agagtctcta aactctcatc ttccccaca gatacacatc1260
caagctcaca aataggagta gcaattctag gtggtagggt tgtgtacgga acccctggct1320
gtctgcatat atctcagaat taccaccagga ccattgtccc aaagtctaga gtctttacag1380
gtaggcaaaa tttgttttca atgcctgtgc ctgagctgct gtcacaaata cccatcttag1440
gatcccatca gcttcccatc ccccaccaga cagccacagt accctcactt tctccctatt1500
gttctttcaa atcctgttct caggaaagaa actgccacta attcattcac actaagggtgt1560
aaatgattga taataggaat gagttacctc ttcccacaga catttgtttt taagtatgac1620
agagcagggc cttaatccca agggaaaagg ttatggaact ggaggggggtg agctttctgg1680
gtagaaggag acttcctgaa tttccttaaa acccagtaag agtaagacct gttgttttgg1740
aaggctgct ccaccatcta agagcaactgt tttttttttt gttgttgttg ttgttacggt1800
ctctgagggg aatagtaaaa aatgcataat cagctgcaat ttgcacggca gcattttacc1860
gattgtggac tgtattggct aatgtgtttc ctggctctta gatgcaaacc attaatataca1920
ctatcttata tcatagtttt ttcaggggtg cttcttgatt agtagggaat tttgaacacc1980
tctttaaata cagctagaaa ataaaaacca tttgtaaagc cacatttgca tatgatgcca2040
gcctcacgca tttgtatatc tccagaaatt cagggtatgcc tcaccaattt gcccgctctt2100
aataaaatct tgtgttaaaa tttgcatcac gtcgccttcc tatgtatgac gaaacaagaa2160
acagagattt ccaattgctc ttttgtcttc agacatttag taatataaag tacctatttt2220
tatgctgaaa tgtttataca ggtttattaa tagcaagtgc aactaactgg cggcatgcct2280
tgcaacacat tttgatatat tagccatgct tccgggtaaa ggcaagcccc aaactcctta2340
tcttttgcag tctctctggg atcagtaaaa gaaaaaaaaa ataatgtgct taagaagtgg2400
gactgtaaat atgtatatat aactttgtat agcccagta cctacctgt atagaaaaat2460
aattttaaaa atttgaatgg aagggggtaa aggaggtcat gaagtttttt tgcattttta2520
tttaaatgaa ggaattccaa ataactcacc tacagatttt tagcacaaaa atagccattg2580
taaagtgtta aaatttcaga taagtattct attggggagg aaaggtaact ctgatctcag2640
ttacagtttt tttttccttt ttaatttcac tattttgggt ttttggtttt tgcagtccta2700
tttatctgca gtcgtattaa gtcctattgc tagaataggt tactacaaaa aagggttatat2760
tctgaaagaa aaataactga cattatatat aaccaattaa tttaaagtat tgccatttaa2820
attacacact gagagcatgt cctatgcaga catagatttt tctgttcatt tatttttctt2880
cattgcagtg gattgatttg ataaatagat gtgttgaatt actacatttg ctgtacatat2940
tatttaataa actttattca gaattgcgtg gcaaaaaaaaaa 2980

```

<210> 73
 <211> 227
 <212> DNA
 <213> homo sapiens

<400> 73

```

cagcattgct ccacggcaca gcataaggat agatcccaag tccacagggt ccattttgca 60
ggtcatatcc tgatcctagg aaatgtcctt ttcccatagt tgcctatgc ctttgggggtt120
tagtctatcc caggggtaac tgtggagaaa tcattgggtt gagagtcaag agagcattgg180
ttttggagct ttaatccctt tctggttgaa ataagggtgt caacttg 227

```

<210> 74

<400> 74

000

<210> 75

<211> 773

<212> DNA

<213> homo sapiens

<400> 75

```

cggaagtgtg aaggttcctg cctctcctcg gccaggcgga acctctctgc tgggcccgggt 60
ggccgcaaaa gaactttctt tctcccgccc gaacgggtcgc cgcggccaac tgcctcgccc120
gcctggcagc ctaaccctcc ttctcttctt ctccctctcg gcttcgcgcg gccctgcctc180
cctctcgccc ggcggcatcc gcttgctgct gccaccgct cctcatcttc tgcccggcca240
accggcctgc cccgtgcagc tgatgtgcga caaggagtgc atgtgggccc tgaaaaacgg300
agacttggat gaggtgaaag actatgtggc caaggagaga gatgtcaacc ggacactaga360
aggtggaagg aaacctcttc attatgcagc agattgtggg cagcttgaaa tcttggaatt420

```

```

tctgctgctg aaaggagcag atattaatgc tccagataaa catcatatta ctctcttct480
gtctgctgtc tatgagggtc atgtttcctg tgtgaaattg cttctgtcaa aggggtgctga540
taagactgtg aaaggcccag atggactgac cgcctttgaa gccactgaca accaggcaat600
caaagctctt ctccagtgat ggatggatgg actgataact ccggaagaat gactctcctg660
tggcctcaca ctgctgcctg tctgtctgtc actctctatc tgccagcttc ttcagctaaa720
tactttaaga ggggtgaggg gagagagaaa ttcataacaa atccgactac cag 773

```

<210> 76

<400> 76

000

<210> 77

<211> 870

<212> DNA

<213> homo sapiens

<400> 77

```

gacccggcgt ggctactagg agaaggacgt acggctcctgc tagtagagga atatgtcgag 60
tttctctagg gcgccccagc aatgggccac ttttgctaga atatggtatc tcttagatgg120
gaaaatgcag ccacctggca aacttgctgc tatggcatct ataagacttc agggattaca180
taaacctgtg taccatgcac tgagtgcactg tggggatcat gttgttataa tgaacacaag240
acacattgca ttttctggaa acaaatggga acaaaaagta tacccttcgc atactggcta300
cccaggtgga tttagacaag taacagctgc tcagcttcac ctgagggatc cagtggcaat360
tgtaaaacta gctatattatg gcatgctgcc aaaaaacctt cacagaagaa caatgatgga420
aaggttgcat ctttttccag atgagtatat tccagaagat attcttaaga atttagtaga480
ggagcttcct caaccacgaa aaatacctaa acgtctagat gagtacacac aagaagaaat540
agacgccttc ccaagattgt ggactccacc tgaagattat cggctataag agaataagaa600
ttgcagaaaa taacagtga gttgattgaaa ctttcttctg atgagtttct ctaacctaca660
ggatggagta aaacaactgc tacagttcag cactgtttt atgtgccgaa tcaactgtgg720
gaaaggtcag gaaggtgtag tccttcaata ggaaattgta attaaaatat aattttatag780
aaccattttt atgtaatctg atttgaatgt tatagttgat aataataaaa tcacttactt840
ggttgactaa aaaaaaaaaa aaagtcgacg 870

```

<210> 78

<211> 237

<212> DNA

<213> homo sapiens

<400> 78

```

ttgtgatcgg ctatccttcc cggatcaaca gcgagcccag ccggtcatc tacaaccggc 60
ccgggaacaa cgtgaaactg aactgcatgg ctatggggat ttccaaagct gacatcacgt120
gggagttaac ggataagtcg catctgaagg caggggttca ggctcgtctg tatggaacaa180
gatttcttca accccaggga tcaatgaccc attcagcatg ccacaaagag ggggtggc 237

```

<210> 79

<211> 439

<212> DNA

<213> homo sapiens

<400> 79

```

gtttgggaag ttgagatttg gagcgaataa gtagggatct ggcaagagga tcatctacct 60
cagtcattag gatttcttaa taaaaaagag attgtatttt tgagttgggtt attaagatta120
ttaaaattag cccttccctt gaaatatgac atcagctttt ctgttctaaa tttaaaatta180
gttgcttcac cagtgcaca cttccagttt ctataccaag ccagtcttct cagttttccc240
cttaggatgg gacaagtctg ttcagggggg cattctgtaa gggttcagcag ggggtttggg300
agaggattta aggggaaata cagtgggggg agaattgggt cgggggtaaa ggtagggggac360
aaggagggga gggcgaaagg aggggtggaa ggatgggggc cttacctaga tcgggggatg420
ccggggggggc aaggcaagg 439

```

<210> 80

<211> 2483

<212> DNA

<213> homo sapiens

<400> 80

```

gcaaaagtct tcaaactatt gagaaagagc catagactga gtgcaggcac cagtgcgctc 60
ttattactgt gtcaattaaa tgaatgtatt tgaatgtttg gatacttacc tctgaatgta 120
ttttgagtaa taacttcaag tgcaaattat gccatgcata atttcttttg tctcatgttt 180
ttccccctt ttcttttagg ctttgtcttc tgagtctata gaaaaacttc cagtttttaa 240
caagtcagcc ttcaaacatt atcagatgag ctctgaggct gatgactggt gtatcccaag 300
cagggaaacca aagaacctgg caaaagaagt ggccatgtga agaggggacac tcaggacact 360
ttacgggatc aaagtgggtc tacaccagtg ctgcttcctg aatgtttgtg tgtgaaccct 420
tgtttcttcc aaaacaaacg acagcaacga aaactcctta atcagaacac tgatccaatg 480
aggaatggag cttgtttctg tgaccagga gaacttagtg caagactaca ggagttaaca 540
gatggccagc tccttatttt ttaatgtaga ataactcctg agtttatatc aaatcctgaa 600
gaaataagcc tcagttttcc atctgttttt gataagaata agaaagggag tgagtgtgaa 660
gatgggtggt agcagtttca ctaagactga tatttttagg ctcttggttca catcaaaaga 720
tattggtgtc agaataccag cattttcctg ccatgcaaag gattaaaact tagtttacag 780
tatgtggtta caaatatatg tcaatgtaca ttttgaacat atttatgtgc tatggaagga 840
aatgctgggt actaaaaataa ggtttactct gaaagaggag gaattttatt caaagcattc 900
aaacatttta ttcaagtgtt tcaaaattca aagcattgta ttcaaagttg cagtgaaggc 960
atcaacttat gtaaaaactc agaaggaagg ctctctgat aaaaacacag ctcttttatt 1020
atgctgcttt tcttgttcac tttacacact aagtaaacac ttattgtcag gtgcctagtc 1080
ttgagtgaat tgtagatgt gcactgaact cgggatgttg gggattggag agagagaatt 1140
gccaaagtta cagcaaaaat atctcttact ttgctttggt tataaataaa ttagttagatt 1200
ggaaaaacta gtgttaggga aagaaatcac atgttcagag cctaattcag taggaagggc 1260
ttttctctac cctgaaatga aggtaatcca aaggcatcca ttttctaggc ttaaaagata 1320
tatttttgat atatttaatg atattctcta cactccagca ttaatatgtc tgtttaaaaa 1380
ttaactaatt tcaaatggct caagaacatt agaatttaag taccttttag agtaattatt 1440
ttaagcaaat agcctggacg taagagattc tcatgccagc atgctttcat ttgtcagttg 1500
ttgtgactga gagataatga atgacacctg aaatgcataa ggtatttttg ggagagttaa 1560
ggtataattt gaagggtggc agaccagttg ggctgattac tcttagagaa gaagaaatgg 1620
aaaaatgaaa gaaggcagga aggaaagaaa ggatatagga agagagggaa gcagaaggca 1680
ggcatttttc tattttcccc acaaattatt tcaaaaaaaa tctgtatttt ctgggatatt 1740
tcattggcaa gaggaagaac tgggtgtttg aaagcagtat ggattcttta aatgcctctc 1800
actcttacaa gatagtaggc tttgagataa taaacttacc cgtgtcaatt aacattttaa 1860
ctggcatata gaaaaaaagg aggatttttc tgcattgtaa aataatcagt atggtttata 1920
tggtgaattt gacattttgt tgtaatttca tgggtggcta gtgttggtg gcttctggta 1980
atggtaatag aagctcaact atttttttgt ggatttcagt ttttatcatc agaagtccta 2040
gacagtgaca tttcttaatg gtgggagtc agctcatgca tttctgatta tacaaaacag 2100
tttgtagtag gttattttgt atttcagttt tttactgaaa tttgagctaa acatttttac 2160
atgtaaatac ttgtattttc caaagattta aatcagttga ttaatttaatt aactcaaaata 2220
ctgtgaacta tcttttaaac actagaaaaa agaaatgtta gtatctcaat tacacaaact 2280
gtgcaaatga actttgataa aatagaaata atctacattg gcctttgtga aatctgggga 2340
agagcttttag gattctagta gatggatac gaatactcag gccacttaa tttattaatg 2400
tatacattgt gtttttgtct ttatgctatg tacagagaaa tgtgataatt tttataata 2460
aatatttttt atgatgataa aag
2483

```

<210> 81

<400> 81

000

<210> 82

<211> 353

<212> DNA

<213> homo sapiens

<400> 82

```

gggtggtgggg ggggggggtgt tgggccaaaa gacttcggta tctgacaaca gcatcatcta 60
cctcagtcac taggggtttct taataaaaaa gaggttggtat ttttgacttg gttattaagg 120
ttattaaaaat tagcccttcc tttgaaatat gacatcagct ttgctgttct aaattttaa 180
ttagttgctt catcagtacc acacttccag tttctatacc aagccagttc cctcagtttt 240
cccattagaa tggacatgtg ctgttcagcg tgtoatgtct gtaatgcttc atgcagagag 300
tttggtcata gtattaaaga gaaaatacag tgaggtcaca atgtctccag agc
353

```

<210> 83
 <211> 1039
 <212> DNA
 <213> homo sapiens

<400> 83

```

cgggggataac caaacacagc tgtttacggt ttctccctta acccatgctt tcataaaccc 60
cttcggacag cttccccgtc caggctttct aaccacacct accccagggg tgccgcattc 120
ctgcactcag aagtctgcag cggtcctca aaaaacttga ttgtgccata aaaatcactg 180
gggatcttgt taatacagct tctaactcaa tagatctggg agatcctgca tttctaacaa 240
gctcccaggt aaggcggagg ctgctgggtg gaggaccatg ctgtgagcag cagggcgaga 300
gtgcccaggg ctgatataata ttggaaatat caccctgaa gccatcgctg gccccacct 360
cctgtggact gatgccccag ggattcccac cccacttctg caaccccagg tatccttcat 420
tatccacccc atcccagact cccaccccag ggattgcccg tgaagacttt ggcctagcaa 480
attgtgttgg ttatgtgagt gttgttttaa tcagagatgt acatgattgc caatctgcat 540
ttcttaccag tgtgaccaca ctgttacgat gcaattctag ccaaaaaaaaa actttttcct 600
agtcttatgg aaagcaaata tacaatgatt ttcagtaggc ttctggaata gaaacagtgg 660
tttgaagacc ccaactgccac ctttatggac tggccccctt gagtctgaat ccccggcctc 720
tgtcacctga gacccaaccc ctgactgggc caactccagt gaattcacc atttttcttc 780
ttcagaaggc ctttccctgtg tgagaccac atatttttaac cttttgctcc tatcccattt 840
ttaaagaatt agagaataaa ccaggcctgt ttcttttccc ctgaaatccc tgccctctggc 900
      aaacc catcatctaa ggtgacagag cagtgtctggg aataggcatc ttcctttcaa 960
ccccccaaa actggccaca gataggctgg ccattgggaag ggtctttgga tttcggggga1020
ggcaaacgtg ggggattgt                                     1039

```

<210> 84
 <400> 84
 000

<210> 85
 <211> 330
 <212> DNA
 <213> homo sapiens

<400> 85

```

agtgtatttca gcaaatgagg gtcagaactt tcagtttatt gatggttatt cagccgcaga 60
tgagagtttta tgcgtcagcc acttcaattt ctgtaaacag aggcacaggc caaggactgt120
aaggggcaga actagttttt cttcaaaatt gcctaggcat aataaggaaa atagcacttt180
tattttcaagg aaaccgatgg aatgttcaaa tgaggaagtt gttaatcaag ggcagtcgga240
tggatcaatg ggtaaatttt aggtggcgctc aaggaggggc ttatattcac tcaaaccg300
atgttattttg gtcgggccaa ggttggaagg                                     330

```

<210> 86
 <211> 235
 <212> DNA
 <213> homo sapiens

<400> 86

```

atttaagtat ttttttagttt ttaaaatgtc tttccggtga ggggaaggagc cccagccaga 60
aagcaattca atcatggtca agtttccaac tgagtcattt tgtgagtggg taatcaggaa120
aaatgaggat ccaaaagaca aaaatcaaag acagatgggg tctgtgactg gatctttatc180
atccattcta aatccgattg aatattgcgg gcttacaaaa tgccaagggg gtgac 235

```

<210> 87
 <400> 87
 000

<210> 88
 <211> 866
 <212> DNA
 <213> homo sapiens

<400> 88

```

caggaccagc ctggccaaca tggcaaaacc ctgtctctac taaaaagtaa aaaaaattag 60
ccgggcatgg tggcttgtgc ttgtagtccc acttcagtct aagtagctgg gactacaggc 120
acgtgccaca agcccagcta atgtgggtgt tttgttagag atgaggtagg gccatattgc 180
ccaggctcgt cttgaacacc ggggctcaag gaatctgccc atcttcgcct cccaaagtcc 240
tgagatagca ggtgtgagtc atcatgccc gcctccttga agtttactaa caattgggat 300
aactgaggga agagaagtga caattccact cagtctatta gaggtctgga tataaggtag 360
ccacacaata actctaactt gaacttctaac cattctatct tattgatttg gaggctgtct 420
tctgccagat tttttgtggc ttgagatgat attttcgaac ccttctttca ctacctttct 480
tacccttaat gtgccaagct tgaaacagga tttgatttcc tgagctactt gttcgccttc 540
tgtgctcac caagtaatct gggttcattc tcgtctcatt catgttattt tcaagtgaag 600
caagacattt tgggggtcaa gtctcttttg gtgttttgtt tttatgtata taaaaatgga 660
ttttgtgttc cctttccatg taagtaccaa cttatatgga aactcacaat cataatgtaa 720
agaagaaatg aaagcctggg gtattgtact tcaagatgcc tccctgatgt atagaatctc 780
cttgtaaaat aaataattgc attgtatata agtcttccca tcaatattaa ttattaaata 840
ttttagaatt tttaaatacc aactat

```

866

<210> 89

<400> 89

000

<210> 90

<211> 846

<212> DNA

<213> homo sapiens

<400> 90

```

ctccttgtec aacggaaaaa acatggaagg gttaagccta aacaaccctc aaacggaact 60
ttatgccaga aaacaactac ggaataaaaa cccacaaaaa tacagagagg aacgttttta 120
accttttagg cctgcgtcct ctgccttttg cccatcaggg tcaaagagta ggagttagga 180
aggaagggat gggacagcat cccctgggac gttcaagtac catccctggg ctccactctc 240
cagccttaga gagtggacca gccagagcac ctctctgga ctctcagacc tgctgctttg 300
tctctaccaa ccttggcagg gatctaggat ccatttagtg ggatcagggt ccagtcaata 360
ccattggggc tcaaataagt tcttagaacc acagagtcta gggccagggt cccaactcat 420
aggtgacgga gttccctttc aagctcgtgc cgaattcggc acgagcgggc acgagcttga 480
agggaactcc gtcagctatg agttgggacc ctggccctag actctgtggt tctaagaact 540
tatttgagcc ccaatggtat tgactgggac ctgatccac taaatggatc ctagatccct 600
gccaaggttg gtagagacaa agcagcaggt ctgagagtc agacgaggtg ctctggctgg 660
tccactctct aaggctggag aaggagagac aggatggtac ttgaacgtcc cagggatgct 720
gtcccacccc ttccttcctc actcctaact tttgaccctg atggccaaag ccagagacgc 780
aggccctaaa ggtaaaaacg tctctctgtt attctctggc ttttactccc tagtgtctct 840
gcataa

```

846

<210> 91

<400> 91

000

<210> 92

<211> 1374

<212> DNA

<213> homo sapiens

<400> 92

```

cgaaagcgtc ggactaccgt tggtttccgc aacttcctgg attatcctcg ccaaggactt 60
tgcaatatat ttttccgcct tttctggaag gatttcgctg cttcccgaag gtcttggacg 120
agcgtcttag ctctgtggga aggttttggg ctctctggct cggatttttg aatttctccc 180
tggggactgc cgtggagccg catccactgt ggattataat tgcaacatga cgctggaaga 240
gctcgtggcg tgcgacaacg cggcgagcaa gatgcagacg gtgaccgccc cggtggagga 300
gcttttgggt gccgctcagc gccaggatcg cctcacagtg ggggtgtacg agtcggccaa 360
gttgatgaat gtggacccag acagcgtggg cctctgcctc ttggccattg acgaggagga 420
ggaggatgac atcgccctgc aaatccactt cacgctcatc cagtccctct gctgtgacaa 480
cgacatcaac atcgtgcggg tgtcgggcat gcagcgcctg gcgcagctcc tgggagagcc 540

```

```

ggccgagacc cagggcacca ccgaggcccc agacctgcat tgtctcctgg tcacgaaccc 600
tcacacggac gcctggaaga gccacggcctt ggtggagggt gccagctact gcgaagaaag 660
ccggggcaac aaccagtggg tccccctacat ctctcttcag gaacgctgag gcccttccca 720
gcagcagaat ctgttgagtt gctgccacaa acaaaaaata caataaatat ttgaaccccc 780
tccccccag cacaaccccc ccaaaacaac ccaaccacg aggaccatcg ggggcagagt 840
cgttggagac tgaagaggaa gaggaggagg agaaggggag tgagcgccg caccagggc 900
agagatccag gagctggcgg ccgccgatca gatggagaag gggggaccca ggccagcagg 960
agacaggacc cccgaagctg aggccttggg atggagcaga agccggagtg gcggggcacg 1020
ctgccgcctt ccccatcacg gaggggtccag actgtccact cgggggtgga gtgagactga 1080
ctgcaagccc caccctcctt gagactggag ctggcgtctg catacgagag acttggttga 1140
acttggttgg tccttgtctg caccctcgac aagaccacac tttgggactt gggagctggg 1200
gctgaagttg ctctgtaccc atgaactccc agtttgcgaa ttatagagac aatctatatt 1260
gttacttgca cttgttatte gaaccactga gagcgagatg ggaagcatag atatctatat 1320
ttttatttct actatgaggg ccttgtaata aatttctaaa gcctctgaaa aaaa 1374

```

<210> 93
 <211> 761
 <212> DNA
 <213> homo sapiens

<400> 93

```

gcctgatggg ctggagccag actgtggtct gaggaggaga cacagcctta taagctgagg 60
gagtggagag gcccgggggc aggaaagcag agacagacaa agcgttagga gaagaagaga 120
ggcaggggag acaagccagg cagcatggcc accttcccac cagcaaccag cgccccccag 180
cagccccag gcccgaggag cgaggactcc agcctggatg aatctgacct ctatagcctg 240
gccattcctt acctcgagg tggaggccgg aaaggctcga ccaagagaga agctgctgcc 300
aacaccaacc gccccagccc tggcgggcac gagaggaaac tggtgacca gctgcagaat 360
tcagagagga agaagcgagg ggcacggcgc tgagacagag ctggagatga ggccagacca 420
tggacactac acccagcaat agagacggga ctgctggagg aggaggacc aggacaggat 480
ccaggccggc ttgccacacc cccacccctt aggaacttatt cccgctgact gagtctctga 540
ggggctacca ggaaagcgcc tccaacccta gcaaaagtgc aagatgggga gtgagaggct 600
gggaatggag ggcagagcca ggaagatccc ccagaaaaga aagctacaga agaaactggg 660
gctcctccag ggtggcagca acaataaata gacacgcacg gcagcacaaa aaaaaaaaaa 720
aaaaaaaaatcc ttgttaaaaa aaaaaaaaaa aaaaaaaaaa a 761

```

<210> 94
 <211> 1825
 <212> DNA
 <213> homo sapiens

<400> 94

```

agggagcta gtagcggacc ggaagtgagg caccctcggg ctcgagacag cggcgacgtt 60
taaagctgag cgacccagtg ccactggaga cggctcagctt ctccactcag gctcctccag 120
cccagaccag aagacccccct cccccagaat tctggggggc gatggaaggg agccgagtea 180
gatcgcgagg taccagagc cgacagaccg gagcgacagg gagtgtccag aagccccgcc 240
cctaggagtg atcgaaagc ctcacccatc cgggtgagga acccgagga ccgcctccgg 300
cgggagcgcc gacctggctt acgcccctgg tggcgggctc cgcagctcta cgcttcgccg 360
ccgcggttag ctggcaggtt gtgcgaggac gctgcgtgga acattttccg cgagtactgg 420
agtttctgag atctctgcgc gctgttgccc ctggcttggg tgcgtaccgg caccacgaac 480
gcctttgtat gggcctaaag gccaaaggtg tgggtggagt gatcctgcag ggccggcctt 540
gggccccagt cctgaaagcc ctgaatcacc actttccaga atctggacct atagtgcggg 600
atcccaaggc tacaaagcag gatctgagga agattttgga ggcacaggaa actttttacc 660
agcaggtgaa gcagctgtca gaggctcctg tggatttggc ctggaagctg caggaacttg 720
aacaagagta tggggaaccc tttctggctg ccatggaaaa gctgcttttt gactacttgt 780
gtcagctgga gaaagcactg cctacacgcg aggcacagca gcttcaggat gtgctgagtt 840
ggatgcagcc tggagtctct atcacctctt ctcttgctg gagacaatat ggtgtggaca 900
tgggggtggc gcttccagag tgctctgtta ctgactcagt gaacctggct gagcccatgg 960
aacagaatcc tctcagcaa caaagactag cactccacaa tcccctgcca aaagccaagc 1020
ctggcacaca tcttctcag ggacctctt caaggacgca cccagaacct ctagtggcc 1080
gacacttcaa tctggccctt ctaggccgac gaagagttca gtcccaatgg gcctccacta 1140
ggggagggca taaggagcgc cccacagtc ctttaggaat ctttaggaat ctggctcac 1200
caaccaggt catatctaag cctgagagca aggaagaaca tgcgatatac acagcagacc 1260
tagccatggg cacaagagca gcctccactg ggaagtctaa gagtccatgc cagaccctgg 1320

```

```

ggggaagggc tctgaaggag aaccagttg acttgccctgc cacagagcaa aaggagaatt1380
gcttggattg ctacatggac cccctgagac tatcattatt acctcctagg gccaggaagc1440
cagtgtgtcc tccgtctctg tgcagctccg tcattaccat aggggacttg gtttttagact1500
ctgatgagga agaaaatggc cagggggaag gaaaggaatc tctggaaaac tatcagaaga1560
caaagtgtga caccttgata cccactctct gtgaatacct accccttctt ggccacggtg1620
ccatacctgt ttcttcctgt gactgtagag acagttctag acctttgtga tagaactaaa1680
atgctctctg tactctagtc tcctgcctcc tcagctctgc aagtagttta gtaggaatga1740
agtggaagtc caggcttgga ttgcctaact acactgctaa aaatatttgt aatccttaat1800
aattaaactt tggatttgtt aaaaa 1825

```

<210> 95
 <211> 1374
 <212> DNA
 <213> homo sapiens

<400> 95

```

ccgggattcg cccctcgggg agcgatttgg cctcgggagg ggccggggagg tggacgcggg 60
taccggcggt cgtcgggtcg gcagcctttg gtcagttggc agcggcaagc gcgctgcgg 120
tccgggtggcg ccatgtcggt ctgcagcttc ttccggggcg aggttttcca gaatcacttt 180
gaacctggcg tttacgtgtg tgccaagtgt ggctatgagc tgttctccag ccgctcgaag 240
tatgcacact cgtctccatg gccggcggtc accgagacca ttacgcgca cagcgtggcc 300
aagcgtccgg agcacaatag atctgaagcc ttgaagggtt cctgtggcaa gtgtggcaat 360
gggttggggc acgagttcct gaacgacggc cccaagccgg ggcagtcccg attctgaata 420
ttcagcagct cgtgaagtt tgtccctaaa ggcaaagaaa cttctgcctc ccagggtcac 480
taggcgggca gcccacaccc accccagacg gccaccacac tgaggccaca cgttggccat 540
tccaccttgg agttggaacc ctgggcgtcg agacaggaag gcaggggcgca gtggttgaaa 600
catcaggaca ctcccaggc cccggctctg aacaagacct ttctgtttct tggaaaagag 660
actcatttgc tgatggttca tgcttctgc tgggacaggc ctgggctgtg cagccacact 720
gtcggctgac ttagccccct gctcactcta ggtgcctcca ggaggtgagc cctgggtgca 780
gctggtctct gaatgacgtt acaccctcac cttcttttcc tggccctgtc tctggactct 840
cccctgtgag gcccattcc aagacagact ctgcctctca ccgaagctta ggcccacatc 900
tcccaggctg cttaggagac agaattgaaa cggaggccgc cctgccagc cgccctggcc 960
ctggtcactg catgatccgc tctggtcaaa ccttccagg ccagccagag tggggatggt1020
ctgtgacctg ctgggaaggc aggcgtatgg gccacacct tggcctctcg tccacgaggg1080
gagaaaccta aacctgttt cacaatctgt gcggaagtag cttgcctcac ttctgcttag1140
gaaagcggct gttgctccat aactctaacc agcacagggc tgaggcctgc agtgacacac1200
tgcagggagg ccttcccaa ggtgtggtga ctgtgcctta ctgtacatgc tcggaggcct1260
ggccatatag gaggggtggg gatgctgaaa tcacccccca tcttaagtaa ttactttctg1320
gagtaatcag gtggaatcc atagacaaat gaaacattca gatgtaaaaa aaaa 1374

```

<210> 96
 <211> 2615
 <212> DNA
 <213> homo sapiens

<400> 96

```

cttgggaagc tcctggatct ttgtcaacct gactgtgcga ttctgtatct tgggaaaaga 60
gtccttttat gacacattcc atactgtggc tgacatgatg tatttctgcc agatgctggc 120
agttgtggaa actatcaatg cagcaattgg agtcactacg tcaccgggtg tgcttctct 180
gatccagctt cttggaagaa attttatttt gtttatcatc tttggcacca tggaaagaa 240
gcagaacaaa gctgtgggtt totttgtgtt ttatttgtgg agtgcaattg aaattttcag 300
gtactctttc tacatgctga cgtgcattga catggattgg aagggtgctc catggcttcg 360
ttacactctg tggattccct tatatccact gggatgtttg gcggaagctg tctcagtgat 420
tcagtccatt ccaatattca atgagaccgg acgattcagt ttcacattgc catatccagt 480
gaaaatcaaa gtttagattt ccttttttct tcagatttat cttataatga tatttttagg 540
ttatacata aattttctgc acctttataa acagcgcaga cggcgctatg gacaaaaaaa 600
gaaaaagatc cactaaaaag aaagatttag atggcttctt gccagtttga gcctaactctg 660
attcttacag ttttaccttc ttgaaccaat gtaaaagttt ttttaatgtt aaatgattaa 720
attctcagtg aggcatact ctttttcccc agtaacattc ctgaatttac tgttatctta 780
ttgtagtact tgcattgacat ggattcctga tatctgatga gaggttcatt cttgtgtatt 840
cagttaatga caccaaaagg ctcagcccac cccaacctta tctcatgttc agtctgtcta 900
atacatgcca gagatttttt tttcaaaaag tgctttatcc ctacaatgta ctgacagttc 960
ttacagttga gatttgttct tttcagctat tgcttgtgaa aaaaagcaag actatgtcac1020

```

```

tctatagaag gctgttaaag tgactcaggc aggaattaat tattctgtac ctaaggggtt1080
acttgtttta tgggatggca ttgacttttt gaaaatcaag tggactgagt cattgataaa1140
acattttctaa gagtggggct agagaacata ctttacatct gacatccttt ggcctaacaal200
catctattat tatagtgtct agcagtgtgg gcattgaaga ggcgcagaat gctttgaaag1260
aaactaatca gaatcttgga acatcatgat catgccattc ttaagtaaat caactatttt1320
caacactgaa gaaaaatgaa acattattta gaaaacaatg agattacaag ttccaaactc1380
agccaggaat gtggctcaca cctgtaatcc cagcactttg ggacacctag gtgggagcat1440
cgcttgaagc caggagtcca agaccagctt gggcaacgta gtggagaccc ctatctctac1500
aaaaaataaa aaaattagct ggggtgtgat gcacacacct gtttgtccca gctactcaag1560
aagctgagat gggaggatcc tgagctcagg aggtcaaggc tgcagtgagc cgagattgtg1620
ccactgcact gcagcctggg gtgacagtgc aagaccctgt ctcaaaccac accaaaccac1680
acacacacaa acacacatac acacacacac acacgaggtc caaatggtag cagggatcca1740
aaggggaacac agtatgttag tcaaaactgg agtaaacagt tacagccttt gacaaactag1800
aaatattaga gtaggccaaa cacacctcca aactgtaagg ctgtgcacaa acataaaaaa1860
tggcagcctt ccactctctg cactggctga gtccattttt ttgtgtactt gttctagtga1920
gtgggtgggac tgtacatttt tgaatagacc tcaaaaatac ttcattctgc tgctgttcag1980
ttggcttttt aaacctgtct gcagtaggac actgaaaaca gcaagaactt cgggggtgaac2040
acccgctgat ccttttaaca ggattttctg caggaaactc acaaaaagga gaactgaaaa2100
tttagacata cagttggcca ttgtaaaaaa catcagtttc ctctcataca ttccaagtaa2160
accaagtaaa ataagtgttg gagtaacact tgcataaaag aatttaagga gtgatagctc2220
tttctgttct gccattccca acattcctgg gggaaaggag actcaatgag ttaatactat2280
ttcactgagc ccaagatgga aacttggttt gacctaaaac atctgattaa tataggctag2340
ctgatttctt aaaaattcgt tgcattgaag gatattttgc atgtctgtaa cacctgtcaa2400
tacttgttgg tattgatttc tgatattctt gcagctgact acgtgtaatt gggcagatca2460
gctttgcagt agattatgct gcacccctgt gcaaaaattc tgtattctta gtgattgta2520
caaacccttt tattgtctgc tgagaaaagt aaagattgtg tatttctatt aaaacattta2580
caatcaaaaa aaaaagaaag aatagaagaa aaagg
2615

```

<210> 97
 <211> 508
 <212> DNA
 <213> homo sapiens

<400> 97

```

gttggcagaa acccggtatc cggttccggt gggcctccat cagcaagctc cagtgtctacg 60
tgtccctggc attttaggtg tcgggtgggt aggcagtcac ggatcaggta atgcagtttg120
ttgagccaag tcggcagttt gtaaaggact ccattcggct gggtaaaaga tgcactaaac180
ctgatagaaa agaattccag aagattgcca tggcaacagc aataggattt gctataatgg240
gattcattgg cttctttgtg aaattgatcc atattcctat taataacatc attgttgggt300
gctgaataca ttttggaaga gagtttttca tcttagagat tgggtgaacaa gtgtgagggt360
gtgagaaatc cacagaatac aaatttgccct gtatgttttg tgggtttttt tttttccttt420
caagatgttt tctatttcta aattaaagt atttcaaagt aaaaaaaaaa aaaaagtcga480
cgcgccgcgc aatttagtag tagtaggc
508

```

<210> 98
 <211> 3588
 <212> DNA
 <213> homo sapiens

<400> 98

```

ctccgtctca aaaaaaaaaa aaaaaaaaaa aaaaggggaag ggaatcccat tttgtgatga 60
tttgggcaca ctacttgagc tgaggctagc agtcacatga ttttggctgt ctctgacctg 120
aagcttttga agtaagggtta tgtctcttcc ctgaagcttt gtttatagtg gtaatttgggt 180
gagtttgagc tttgagcttg tcttagaaaa taagactgtc cacctgggga ggggagctta 240
tagggaaccc gtgttaactc agaattgtga agaaagtgtc tttagccaac aaaagtaaga 300
ttactatcta gaagggtgaa agaagtcatt gcttctgttc ctccagcagt cagttgactc 360
taggtttcct ttggtttata tccccagttc ttaatactaa aacttatttg acttcctatc 420
aggaagcaca caaaaaaagc gtcattttaa accctggata taggctttta aggatacaaa 480
aacagcagca ttgtcgtttt gccaggttca tcaccatttt gatgtgctac ccataccttc 540
accctccctt tctgtccccc aagcctccca gccaggccag atgtgaagat tctattaatc 600
actgtttcag agaacattaa ttcttgatga gaataattat ctactaaatt gcttattatc 660
tgtgactacc ttgcagagaa catctcaaca gtgcagtaaa atagctctcc tagacttgag 720
cttcacagcca ggcatttaga tcaactctaa gcctttgtgg aattctgagg aaaaaagca 780

```

```

agatgcctca atgccaatgc tggggccataa gattctactc ccctccctgt aggggtggggc 840
gcgtggctca gcttttggaaa atcatttttgc cagtaaatatt gcctgtgaat ccctttaaga 900
agtcgtcctg atctgagcct gtcttttctga gcacttttggg gctgaattga aaatggtaag 960
ctaaagcagt gacagatcca cgtagcctct ttaacctctt tattatcttg ccaaaaaaaaa 1020
agtttctcag gttaaacctt tgtctttaac ctccctttgt tgtggagaaa atgtgtcact 1080
aatcagtggt ccaagggata tctagctttg gttactcagt tcctgcagca taacagatat 1140
gacttatgcc aggggaaggta gaggctgatt atggagacac ccaggaacag gaataagaag 1200
ggataggtct gctccacgta gaacctcccc agatcggaag ttaagtcttg gagagtttcc 1260
aaagtgtcga agtaaaaagg agacttggag ggcctttgct taatgagcaa gaggcttgtg 1320
tcctcccaag aacatgaggg agttcagaag ggagctatag ctcacagaca gaaacctgcc 1380
cgctcacccc atccctcgtg actgggagca tgtttgtcga gaattttcta agaggactct 1440
cccttcaaaa atccaatttg ctcccagaat gttgttttagc ctctgagaat ctactcttt 1500
cattatcagc tgtgaattga catagatgtg ttgctcaggg atcagaaaca tcagagtcca 1560
gggcccagtg gcatgggtgt gcatttagtag ttgaaaaagt aattgggtcag ctctactgta 1620
aaagaaataa gtatgtagta cagttttgta aatgtcaggt ctgttctgtt gttttgtgat 1680
ctgaagactg tcaaactggg tgataatcaa agaaaagggt ggtggttaga ataagtaaaa 1740
tttcagttag aaagatatag cttaccagtt ttccatgtgc ttaaggaagt caagaatatt 1800
tcaggttggt gagaactggt gtaaaatgga attgaagcta gtgtctctca ccttcttagg 1860
tgatcacag agaggaagtg gaaggccagt agtagctct tcatacttac ttttgccagc 1920
ccagcctcca tttcaaagac tttgtcttcc atcctatcca atgacatggt cagggatggg 1980
ctctgaggag gcagtgaggc cccaccttgg tttgtccac ttacctccac tccactcatc tactatcagc 2100
cagcttaagg gtttttaagt tttctcacga ttacctccac aagagatgaa ctagtgtgtc 2160
atcagaaagg ttaacatccc tgggaccatt ctacttataa tacaatctcc tcttggccaa gttcaacaaa 2220
ttctccctt ttccaggtgt gccatccata tccctcatg ttccctcatg ctcatatggt ttagctgagg 2340
tgtttccag gaaccccggt gggtgaggca aagttagcaa gatgtattga gtttaagttt 2280
tctagaggac aaaagtattt aatctctgtg gaactgagac agagagccag ggacctatgt 2400
cgtaaatggc caagttgagt gggaaatcac cagtggctca gactagactg ctctatcccc 2460
acccagggac cagtcacctg gctgctgttc atttccatca ggaccacca ggaaagcaaa taagttagcc 2520
ccagaactct ttctcatcat taggtcacct aatctcttgg gttgcaggat gagagcatat atagatctcc 2580
tgtttagaga gtgtgttcat aattgtagaa agggatagaa aatggaataa ccaagaggct 2640
gtgtcatttt ttaagaggat ggcaaggatg acctcaaagt agctcaacaa aactgggaat 2700
ccaaggaatg gtgctttagt ggaaagagag gtcagttgtg gtccttaaac ctcttggcac 2760
cttggtcggg ttataaaaca aggagctgga gtaaaattgc ccttaccccc aatccaaatg 2820
ctgtccagga tttaggagct acccaacctg tggttatatg gtgttggttt ccattttttg 2880
tttgtttgct tgtttccaaa atagccttgc ttggtactgc atggaaagtt caagctttttc 2940
ttcttgcccg ctcagggtcg gcctcttccc cgtgtcttca cagcgtccct aaggaagatt 3000
tttgagcac tctctggagc tgaggggagt gaaatttggg ccagagaagg cgggaagaaa 3060
tagttttcct gtttcttttt ctogaggtgg atgtcctcag gcttcttcca cacctccttc 3120
tcatgggtgc ggctggcagt acagtcaggc tgtggaggag ggctgagaag aaaggggcac 3180
tggtccagcc ccaggttttg tctgagacag gtacacagca gataccatcc caccttccct 3240
tctaaagaac aggccagcca cacatataac cttttcccta ctttactaat gtatccctta 3300
tgtgttagca gcaattggag acaggcagac ctaccctctg ccatctagag agaattgtt 3360
tattaccggt aaaacttgac ccccccata tcccactcct ttttgtaaaa acaaattgct 3420
aaacctgtga gcctgccgtt cctttctatg tgtaaatcag tttccttcca tttgagctgt 3480
gtgggagggg agggcattga aattgtaggt tgtaatcttg tgccaaccaa taaaaaccag 3540
tatttcacac aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 3588

```

<210> 99
 <211> 1218
 <212> DNA
 <213> homo sapiens

<400> 99

```

tggtggcggt taaataacaa atctgctaaa gttaggcaac aggcagctga cttgattttc 60
cgaactgctg ttgtcatgaa gacttgtcaa gaggaaaaat tgatgggaca cttgggtgtt 120
gtattgtatg agtatttggg tgaagagtac cctgaagtat tgggcagcat tcttggagca 180
ctgaaggcca ttgtaaatgt cataggtatg cataagatga ctccaccaat taaagatctg 240
ctgcctagac tcacccccat cttaaagaac agacatgaaa aagtacaaga gaattgtatt 300
gatcttgttg ttgctattgc tgacagggga gctgaatatg tatctgcaag agagtggatg 360
aggatttgtc ttagcttttt agagctctta aaagcccaca aaaaggctat tcgtagagcc 420
acagtcaaca catttggtta tattgcaaag gccattggcc ctcatgatgt attggctaca 480
cttctgaaca acctcaaagt tcaagaaagg cagaacagag tttgtaccac tgtagcaata 540
gctattgttg cagaacatg ttcacctttt acagtactcc ctgccttaat gaatgaatac 600

```

```

agagttcctg aactgaatgt tcaaaatgga gtgtttaaact cgctttcctt cttgtttgaa 660
tatattgggtg aaatgggaaa agactacatt tatgccgtaa caccgttact tgaagatgct 720
ttaatggata gagaccttgt acacagacag acggctagtg cagtgggtaca gcacatgtca 780
cttgggggttt atggatttgg ttgtgaagat tgcgtgaatc acttgttgaa ctatgtatgg 840
cccaatgtgt ttgagacatc tcctcatgta attcaggcag ttatggggagc cctagagggc 900
ctgagagttg ctattggacc atgtagaatg ttgcaatatt gtttacaggg tctgtttcac 960
ccagcccgga aagtcagaga tgtatatggg aaaatttaca actccatcta cattgggttcc1020
caggacgctc tcatagcaca ttacccaaga atctacaacg atgataagaa ccacctaata1080
atccggttaa tgaaccttgg cctatagctt agtaatttta agtgggttat tttgggtgggt1140
aatgcccact gcttcacacc ttaaacttgc tttgagttgg tgggtgtacc tttaaacatg1200
cagatcagtg gtgactgg                                     1218

```

<210> 100
 <211> 1303
 <212> DNA
 <213> homo sapiens

<400> 100

```

gtgctcaaga agtgccttga gttgggtgtac agtgccatgg ccagcaagaa tcccagattt 60
caggttttat tacaaaatgt aagtgggtcac ttggcgattt tgtagtacat gcatgagtta 120
ccttttttct ctatgtctga gaactgtcag attaaaacaa gatggcaaaag agatcgtttag 180
agtgcacaac aaaatcacta tcccattaga cacatcatca aaagccttatt tttattcttg 240
cactggaaga atcgtaagtc aactgtttct tgaccatggc agtgttctgg ctccaaatgg 300
tagtgattcc aaataatggg tctgttaaca ctttggcaga aaatgccagc tcagatattt 360
tgagatacta aggattatct ttggacatgt actgcagctt cttgtctctg ttttggatta 420
ctggaatacc catggggcct ctcaagagtg ctggacttct aggacattaa gatgattgtc 480
agtacattaa acttttcaat cccattatgc aatcttgttt gtaaatgtaa acttctaaaa 540
atatggttaa taacattcaa cctgtttatt acaacttaaa aggaacttca gtgaatttgt 600
ttttattttt taacaagatt tgtgaactga atatcatgaa ccatgttttg ataccctttt 660
ttcacgttgt gccaacggaa taggggtgtt gatatttctt catatgttaa ggagatgctt 720
caaaatgtca attgctttta acttaaatga cctctcaaga gaccaaggta catttacctc 780
atttgtgtata taatgtttta tatttgtcag agcattctcc aggtttgcag ttttatttct 840
ataaagtatg ggtattatgt tgcctcagta ctcaaatggg actgtattgt ttatatttgt 900
accccaaata acatcgctctg tactttctgt tttctgtatt gtatttgtgc aggattcttt 960
aggctttatc agtghtaatct ctgcctttta agatatgtac agaaaatgtc catataaatt1020
tccattgaag ctgaatgata ctgagaagcc tgtaaagagg agaaaaaac ataagctgtg1080
tttcccata agttttttta aattgtatat tgtatttgtg gtaatatcc aaaagaatgt1140
aaataggaaa tagaagagt atgcttatgt taagtcctaa cactacagta gaagaatgga1200
agcagtgcaa ataaattaca tttttcccaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa1260
atacgttgga atgaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa                                     1303

```

<210> 101
 <211> 2333
 <212> DNA
 <213> homo sapiens

<400> 101

```

tgaaaaatgc ggacagtata ttcagaaagg ctattccaag ctcaagatat ataattgtga 60
actagaaaaat gtagcagaat ttgagggcct gacagacttc tcagatacgt tcaagttgta 120
ccgaggcaag tcggatgaaa atgaagatcc ttctgtggtt ggagagttta agggctcctt 180
tcggatctac cctctgccgg atgacccag cgtgccagcc cctcccagac agtttcggga 240
attacctgac agcgtcccac aggaatgcac ggttaggatt tacattgttc gaggtctaga 300
gtcccagccc caggacaaca atggcctgtg tgacccttac ataaaaataa cactgggcaa 360
aaaagtcatt gaagaccgag atcactacat tcccaacact ctcaaccag tctttggcag 420
gatgtacgaa ctgagctgct acttacctca agaaaaagac ctgaaaattt ctgtctatga 480
ttatgacacc tttaccgggg atgaaaaagt aggagaaaca attattgatc tggaaaaccg 540
attccttttc cgctttgggt cccactgcgg cataccagag gagtactgtg tttctggagt 600
caatacctgg cgagatcaac tgagaccaac acagctgctt caaaatgtcg ccagattcaa 660
aggcttccca caaccctcc tttccgaaga tgggagtaga atcagatatg gaggacgaga 720
ctacagcttg gatgaatttg aagccaacaa aatcctgcac cagcacctcg gggccctga 780
agagcggcct gctcttcaca tcctcaggac tcaggggctg gtccctgagc acgtggaaac 840
aaggactttg cacagcacct tccagcccaa catttcccag ggaaaacttc agatgtgggt 900
ggatgttttc cccaagagtt tggggccacc aggcctcctt ttcaacatca caccgccgaa 960

```

```

agccaagaaa tactacctgc gtgtgatcat ctggaacacc aaggacgtta tcttggacga1020
gaaaagcatc acaggagagg aaatgagtga catctacgtc aaaggctgga ttcttggcaa1080
tgaagaaaac aaacagaaaa cagatgtcca ttacagatct ttggatggtg aagggaattt1140
taactggcga tttgttttcc cgtttgacta ccttccagcc gaacaactct gtatcgtttgc1200
gaaaaaagag catttctgga gtattgacca aacggaattt cgaatcccac ccaggctgat1260
cattcagata tgggacaatg acaagttttc tctggatgac tacttgggtt tcctagaact1320
tgacttgcgt cacacgatca ttcttgcaaa atcaccagag aaatgcaggt tggacatgat1380
tccggacctc aaagccatga acccccttaa agccaagaca gcctccctct ttgagcagaa1440
gtccatgaaa ggatggtggc catgctacgc agagaaagat ggcgcccgcg taatggctgg1500
gaaagtggag atgacattgg aaatcctcaa cgagaaggag gccgacgaga ggccagccgg1560
gaagggggcg gacgaacca acatgaacct caagctggac ttaccaaatc gaccagaaac1620
ctccttcctc tgggtcacca acccatgcaa gaccatgaag ttcactcgtg ggcgcccgtt1680
taagtgggtc atcatcggct tgctgttccct gcttatcctg ctgctcttcg tggcgtgct1740
cctctactct ttgcgaact atttgtcaat gaagattgta aagccaaatg tgtaacaaag1800
gcaaaggctt catttcaaga gtcattccagc aatgagagaa tcctgcctct gtagaccaac1860
atccagtgtg attttgtgtc tgagaccaca cccagtagc aggttacgcc atgtcaccga1920
gccccattga ttcccagagg gtcttagtcc tggaaagtca ggccaacaag caacgtttgc1980
atcatgttat ctcttaagta taaaagttt tattttctaa agtttaaatc atgtttttca2040
aaatatTTTT caaggtggct ggttccattt aaaaatcatc tttttatatg tgtcttcggt2100
tctagacttc agcttttggg aattgtctaaa tagaattcaa aaatctctgc atoctgaggt2160
gatatacttc atatttgtaa tcaactgaaa gagctgtgca ttataaaatc agttagaata2220
gttagaacia ttcttattta tgcccacaac cattgtctata ttttgtatgg atgtcataaa2280
agtctattta acctctgtaa tgaaactaaa taaaatgtt tcacctttaa aac 2333

```

<210> 102

<211> 1377

<212> DNA

<213> homo sapiens

<400> 102

```

cattactggt atatgagaaa catttttagta atttaataaa aggataatgt ttattttaaaa 60
aacctgactt ttccagagta attttgtttt gcacattcat gtttattgaa gtggactaat 120
ttctataatg caaatcagag ttaaatatta aaaattgtgt aaatacaatt gacataggaa 180
ttacattaaa atattaggaa gaaacaagga caaatttaga ccttgaatcc gaagagataa 240
agcttacttg actttcaaat ggagagatga tgaaaaccca ctcatcagat ctttcagaac 300
aaaaagacag tcatctgata agagtatgac atggatgaaa tgccctacag gggccttgga 360
catctttaat ttctgcgatt atgtgaaaga ggtggacttt acagataatg gagcagaagc 420
caacattagt aaaaggaatc ccaacttctt cccatagaat tagaaacatg tgaaagtaca 480
ataaacttct tgttcaaat accagcatca gagagcttcc catttgcac tagacctga 540
atztatattt attgatcaag ttctaatttg tatgtatatt ttgtgcatat tcaccaataa 600
cagttaaaat taattatgtg ttatagttaa tatatgcacc taccttcttc cgttagtgca 660
tcagtaaatg tgttattttg tcattttttc aaagagagtg ttgtagggtt tccctgtagt 720
tcttctttta tagcttttct tctgataacc atgacttcag gagctttaaa actatctatc 780
ttgcatttgt gtctggcgga gaactagcca tcagcctcct gaagcctgcc atcattgtta 840
atltgaggac tgggctgtct tggggctcag aaggtaaaga actatttgag cagatgtgtg 900
tgggtggcac tggattccac ccaactgcca agttagtatt gttagagatt tcattttaca 960
acacaaaaat aagcctgtgt caaagatttt aaaatcatgg aaagttaaaa tctagaaaga1020
ccttagagaa ccagccaacc aactctctca ttttaaaagt gaaggattca tagcacagat1080
tacttgccca agatcatcca ggaacgaaga caagaatcca aatgtacttg gggacaagaa1140
ttagtcccca aattcagtggt tcttcctagt attaaacatt gcccttttcg acaaattttg1200
gatttcaatc ttggtatatt tcagtaaacc tgctgattta ttaggttact gggtagatga1260
cattagaatg tagatagcgt gcacgctatg atagactctg ctaagacatg ttcccagtg1320
ccagcagcaa tgtagatatg tgtgacagtg gtcattgtag agttataaag cagagta 1377

```

<210> 103

<211> 315

<212> DNA

<213> homo sapiens

<400> 103

```

ataaggaatg agaagaaagg ctgtgtctta tcagtaggtg agatggaact ggtcctggta 60
gtgttggagc aggacaggca cttagttctg atgctgtggt cctttgtgat agtagagcac120
cgggggttaac caccactcct ttaggctact tgtagtgaca acagaagtaa aatatttcaa180

```

ttattttaatt tagaatgtta tgttttactg gaacctgcaa tatgcatgta cagaattaat240
 aatttttact ctttttggtca agttatacta aggcaaagcc agtggattca aaagtgagac300
 attgacaggc cattt 315

<210> 104

<211> 2355

<212> DNA

<213> homo sapiens

<400> 104

atgatcatgc cactgcactc catcctgggt gacagcaaga tcttgtaaaa aaaaaaaaaa 60
 aaaaaaccag gagtgaaaaa ggaaagtaga aggcagctgc tggcctagat gttggtttgg 120
 gaataattagg tgatcctggt gagattctgg atccagagca atttcttttag cttttgactt 180
 tgccaaaagt tagatagcct ttatccagca gtattttaag tggggaatgc aacgtgaggc 240
 caactgaaca attcccccg tggctgcccc gatagtcaaca gtcaagggtg gagagtctcc 300
 ttccagccag tgacctacc aaaccttttg ttctgtaaaa ctgctctgga aataccggga 360
 agcccagttt tctcacgtgg tttctagctt cttcagactc agcccaaatt aggaagtgca 420
 gaagcacatg atggtgaaaa acctaggatt tggcagcctt ccagaatggt atggaatctg 480
 aggggaagatt tatgtttcgt tttggaggat agctcaagtt gaattttctt tccagccagt 540
 tacccttttca acctacctat acctttgtaca actctttacac aaatacttag atatttatta 600
 gatagccctg aattcactct aattataaac agggagtgtg aactgcccc agatgttcct 660
 gggctgggta aaagcagctg gagtgaagca ctcatcttcc ataaaggtaa caaagggcag 720
 ctcatgtggt actcaagctc aaaaggggtt ttttaagagc aagcattggt taagtctgtg 780
 tatactgagt tggaagtgat ttcagcacat tcttttttag tggagtga aa gttctgaagc 840
 ccccttttaa cttcctcttg gtttttcatt ataattggta gccatctcat gaactgtctc 900
 tgatgttgtt ctctttgtgg tcatgtgatt gtgagcttgc tttctgactt gcatttctga 960
 ctttatcctg ttgttaggaa gatagaaact aggttttgaa agattacatg attcaagcga1020
 gggattttta agtaaagatg tatttattct gaagaatcta aaagataaca gattatttgc1080
 ttatgaaaga acaatatagt ctgggaatcc cagaatgtca agccaaagg ctaagaagtc1140
 atctccttca aatactttta taaagaagta tttcgaggag atatctgtcc aaaaagggtt1200
 gactggcctc cagattccag ttatttttaa aaagcaactt accactaaat ccttgagtct1260
 ccatagagta acagtaaaga aactgatgta acagactctc ctctcaaagg atctcctctg1320
 gaagagacta tcagcggcag cattctccag ggaagacca tcccctagtg ccagagcttg1380
 catcctggag actaaagatt gcactttttt gtatgttttt gtccaaatgc aatcccat1440
 ctgtgcctct tagcatgcag ttagatttgg acaaacaaga ttccctaagg atgactttat1500
 taactataat atggttacag ctattatata aatatatatt ctgggttatag ttctaatatg1560
 gagatgttgt gtgcaatgct ggcctgtggt ggtctgtgta atgctttaac ttgtatggag1620
 gaggccaggc tcagagctga gatgtggcct gaaccttccc tgtatcgatc ctttaattta1680
 gaactgtcaa gatgtcactt tctccccctc tgcttttttag tggatatctga catatactca1740
 aaacagtaat ttctgtgtca catcattaac tgctaattct gtattttataa agaattttca1800
 gatggacatg tacaaatttg aactcaaacc atccccagtc cagatacagg gcagcgtgta1860
 ggtgaccaca ccagagcctc agcctcggtc cttctcagcc gtccgggatag gatccaggca1920
 tttcttttaa atctcagagg tagcagtaaa cttttcagta ttgctgttag caagtgtgtg1980
 tttgccaata gataccatt atactaatgt cccaagtaaa tgttcattgc acatctgctt2040
 ccactgtgtt cccacgggtg ccatgaagtg tgtgaggagc ccctcatctg gagggatgag2100
 tgctgcgttg actactgcta tcaggattgt gttgtgtgga atattcatct acataaattt2160
 tatatgcaca gtaatttccc tttttatatg tcaagtaact atttgtaaaa gttatactca2220
 caaattatta taatgattac taatatattt tttccatgtt tcattgcctg aataaaaaact2280
 gtttaccact gttaaaaaaa aaaaagtaaa aaggaggagg tgggaaaaaa aagctggggg2340
 gggggcccg tagcc 2355

<210> 105

<211> 1339

<212> DNA

<213> homo sapiens

<400> 105

attcggcacg agcatgaaac atgctcattt tacctaacag taaacaagta tgttttgata 60
 gatattctgt aatatgctta tagtggttaag aaatggactt gaggtcccag gagatttcat 120
 tttattcacc ctggtcagat acaataaagg ctatgagtat aaatacataa cttcctaacc 180
 aggtgtaggg catgttcatt aatatcaaat cttttgatgc tggacccaag agaggaaaag 240
 ttgtagctaa atgttgattt acttataact agacgtctat gtgagaaaa atatgtatac 300
 atatatatga tatgcagaag tcactttttt tatcaggctt tattctcctt acaaagccac 360


```

agttaaactg tctgcaacag ttgggtttatg ttaatgatag acaaataccc agtggtttggt 420
actttttcca actaccactg taatgataat ctttctcacg tatatacatg caacttcttg 480
gcttccatttc catgaagctg tttcaatata ttcagtatac tttgtcctta atgctgcttc 540
tgtaaacagt gatctctttc tttttttcat tcttatatct tcattagttc atcataaatc 600
tgtccagttg aggctcagg accacggcat gatttcatga ctccgaagta ttttacagaa 660
acatttttta aataagggaa atattttata taccagatgg ttcacaagtg atggctcata 720
gctagttttt ttttttcttc taaaaaatgt cagggtttttt aaatcattta ccttatttaa 780
atgaaaagtg ccatacttaa cttttaaagg aaagacctga cttgcttttt ctctatttag 840
actgtttttg tactttacta atctttaaac tatcaggaaa aaaacaaaaa ctttatacca 900
atgatttagt aattttgagg catagggtag cttacgtagt ggaggatgtg ccaaataattc 960
tcttcaaatg ccaccttctc aatttataac taaaatagtg ttatctgact aattcctctg1020
aattttgatg taagatctat ataggccccc aaaatgatcg tagtacatgc cagtcatctc1080
tcagtgaat aaatacaata ccagagtaca ttatgggttt tattgctttc ttttatggta1140
gacctgttaa tggggaaaaa atacatcaaa tcaaatagaa tcttatatct gtatgttaaa1200
atagagcact tacctgaagt cagtggcctg gatcatagcc ctggatcatt tcccagtcgt1260
tcctgtgctg ggtggacctt ggacaaggcg ctgcagtagg tgatggctga gagcccttc1320
ctgttcccaa gtgccttgt 1339

```

<210> 106

<211> 3751

<212> DNA

<213> homo sapiens

<400> 106

```

gatcgcgagc ggccttttga atctattgcg caaaagaagt ttcatttttg ttacttagac 60
ctaagatcac ttattaaaaa tccttatttt ctccaagccc agcaaacggt gacttctggg 120
caaacctgaa aacctgaaaa tgccactttc atgcagtttg tttgaagtta agtggaatcc 180
tttcaaatga cgagctgcag agaactcagc accaagggct gcctatctgt agatagctgt 240
aaaatggaat attttttaaat gaaggcaaat aagtacttaa aagtgagctg agcaataaaa 300
tgggtccaata ataggtaaat gcaacagaaa cagaaggaga cctgggtgccc ttatgccttt 360
actcttacct ggaataaatt cccaatgcac atcctatgta aaccataagt gaagggaagt 420
aaacctcgtc atgtctcaatg ctgtgagggtg tcctttggat attctgtgat gacagagaag 480
cctattttgt tttgttttca gcatctttct ctgatgtacg tttttaagga ttttgtaaga 540
gctgttttca gtgttttaaat tagtgctatt tttccttggt tttaaaaatg aatctcgtac 600
tgtatcttac tatgtccata cagatgttac aaatcgacag ttttattcct agactcatgt 660
gatccaagct gtatatacca tatataaaca ttttacatga atcatttagt tttttaattc 720
atttactaat gctataaaat ttccctatatt accccagtaa tttgcacag ctggtttata 780
tactaaagca acatgttttg atgagtttct taccctctta tcgaggaatt ggggttagga 840
aaaatacata attgtaaaac tgagtttgct gtattatact ttttttcttg agtattagtt 900
gtattactaa tcatatgttg attaactgtc tacttaaagt caaggtagct gtatttttaa 960
tccactaatt tttttttagt tgggaaatag atttcaggct ttttattaga ctaacatttt1020
ttgagaagta aaattgactt catatacaaa gcctgtaatt ttaggcgaaa tggaagcaga1080
aatctaggaa gttgtgcttg ctgtatggt gagttttggt tcagactaag taatgcatal140
gaattcactc gtttgaagcc ttgaataaatt taggactctg attcactgac caaaagtcag1200
tgttgcagag atttctctac cccgtatggt attttgttag attgttcaac aggaagcaca1260
tgattgagaa catcttggga cagacaaaaa ccactgacag atggcaaggc tcggcgattc1320
tgatttccct tctcaaatct gctcaactcc aagagtcttg agaaactgct aaaattttgc1380
ctctgtcact caagtcttac aaatgttatc ttgtaaacct ttgaggtgaa ctattccact1440
gtcttgtaaca taggcactct attcactgca cctgtcaca cccagcacc cccgcccgc1500
acattatttg aaagactggg aatttaattg ttagggaacag taaatctact tctttttcca1560
gggacgactg tcccctctaa agttaaagtc aatacaagaa aactgtctat ttttagccta1620
aagtaaaggc tgtgaagaaa attcatttta cattgggtag acagtaaaaa acaagtaaaa1680
taacttgaca tgagcacctt tagatccctt cccctccatg ggctttgggc cacagaatga1740
acctttgagg cctgtaaagt ggattgtaat ttccataaag ctgtaatagt ggaggtattg1800
tgggttccat tgagtaagcc ctccaaagat accattcaaa taacctggga gaatgtcata1860
aattttcag ataattaca ctgcatgaat ctgattcaga ggcattgcatt tacatagtgt1920
gccctaatta ccatttgatg atcataaata caagtgaatg acattggact tttagtaaca1980
aacttaattt ttaaaaaggt gtagacaatg gtgggttaaaa aaaaaaaaaa aacaggtacc2040
aggttctgtg tgtttgcacc aagtaattga catgtttttt gtttaataca tgtggaccat2100
gaacagttat cattctactt tttcaaatga tatgtctgag aaaatattcc ttgaagatgt2160
gagatttaaa aatttttccc tttcaatggt gtttttaatt tattttttac ttggtttttt2220
tgattgtag caccagtgata aatcataata ctagacaaaa ttgtcttctc tttcaacca2280
gagccatata tatgtctgta tatatgggac ctactgcttc tctgaggaaa tgcataatct2340
gttaatatca gacaaaatga gcaattggca gtgctcataa tatattccaa tttttattgg2400

```

```

aattttcgcg ggaatgttat ttcaataaag ccatgtaagg tgaaactttg ataacttttt2460
actcttcaag ttagggtaaa ttctgatcca atattcaatt catttgtgta ctcccacatg2520
caaaatgcta aattacaatg cagacattaa gaaaaagtat tgactggagg ggttgaattc2580
cttgagaatt tattttatag tctaaatcac aaatacttta ctcaatttag tttttaaaat2640
agtaaaactga atatttttgt tgtaagccta tcagagtcaa tccttcgttt ggaattgttt2700
tcctgttttt ccttactata aatcatttaa aaactgaatt cattttctta gatggcataa2760
gtctgtctct tgagaaataa gtaaaatact cctattttca gtatctgtag cacctgaaat2820
aggtctttgt atagccagaa acaagttatg ttgaagttag cttttctttg tcaacagttt2880
tggacaataa aaatctgaaa gtattaacac ttgattttct actggggccc ttcaaacttg2940
gttgaagaa attcaaccag aatatctaca tttaggtata atcatgtgtg gtaggaagat3000
ggactagtta atcaagattt gttgtcactt aaattttttg tgattttttt ccaagccagt3060
ttttttaaat tctaaatgtg ttttgaggta tgggtacatt aattgtaatg taaactatta3120
tacaactgtt tttgcgactt tataggcagg taaattttgc tattactatt gaatacaaat3180
gacaattcat ttatgaccac tcaaacagcg ttagtaacca tttagtgaac aaggattaaa3240
acatccatct ggatgttaat tttgaagatg taaattatat gttgtttaaa tttttccagg3300
catctgaaaa ccttatctgc tagacaatgt aagattcaca cagagttatc tgggattctg3360
attttttaaa tagtacatat cattaaacca ttttctctaa atgtaagaag agcagaaaaa3420
atcttataag attatcagat ttttctaag acacagaaat gtaagaaaaa aatcccttta3480
tattgaaaaa agatgcagtc aaagtctttt cagacatgcc caaactttga gaatttcttc3540
aaccatctaa tgctataaag atttttgttc ttctgttca caaccagttg tataacagaa3600
atactagcta ctgttttctt tctgtgtgt gaagtaatga atcattgatt atgtgacttg3660
ttatgtattc aattaaacac taaagaataa aacattcact cttttaatta ataaaaaaaa3720
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a

```

3751

<210> 107
 <211> 300
 <212> DNA
 <213> homo sapiens

<400> 107

```

cgctcggccc ccgcgagag atcgaggtgt acttggccaa gagtctggcg gaaaagctgt 60
atctatgtca gtaccctgtg cgtccagcct cgatgaccta cgatgacatt ccgcacctct120
cagccaagat caagcccaag cagcagaagg tagagcttga gatggccatc gacacctga180
accccaacta ttgccgcagc aaaggggagc agattgcgct gaacgtggac ggggcctgcg240
ccgacgagac cagcacgtat tctcgaagc tgatggacaa gcagaccttc tgctcttccc300

```

<210> 108
 <211> 1465
 <212> DNA
 <213> homo sapiens

<400> 108

```

gccaaccttc cctcccccaa ccttggggcc gccccagggt tcctgcgcac tgctgttcc 60
tcctgggtgt cactggcagc cctgtccttc cttagaggac tggaacctaa ttctcctgag 120
gctgaggag ggtggagggt ctcaaggcaa cgctggcccc acgacggagt gccaggagca 180
ctaacagtac ccttagcttg ctttccctct ccctcctttt tattttcaag ttctttttta 240
tttctccttg cgtaacaacc ttcttccctt ctgcaccact gcccgtaacc ttaccgccc 300
cgccacctcc ttgtaccccc actcttgaaa ccacagctgt tggcagggtc cccagctcat 360
gccagcctca tctcctttct tgctagcccc caaagggcct ccaggcaaca tggggggccc 420
agtccagag cgggcactct cagttgccct ctggttgagt tggggggcag ctctgggggc 480
cgtggcttgt gccatggctc tgctgaccca acaaacagag ctgcagagcc tcaggagaga 540
ggtgagccgg ctgcagggga caggaggccc ctcccagaat ggggaagggt atccctggca 600
gagtctccc gagcagagtt ccgatgccct ggaagcctgg gagagtgggg agagatccc 660
gaaaaggaga gcagtgtcca cccaaaaaca gaagaagcag cactctgtcc tgcacctggt 720
tcccattaac gccacctcca aggatgactc cgatgtgaca gaggtgatgt ggcaaccagc 780
tcttaggcgt gggagaggcc tacaggcccc aggatgtgt gtccgaatcc aggatgtgtg 840
agtttatctg ctgtatagcc aggtcctgtt tcaagacgtg actttcacca tgggtcaggt 900
ggtgtctcga gaaggccaag gaaggcagga gactctatcc cgatgtataa gaagtatgcc 960
ctcccaccgg gaccgggcct acaacagctg ctatagcgca ggtgtcttcc atttacacca1020
aggggatatt ctgagtgtca taattcccc ggcaagggag aaacttaacc tctctccaca1080
tggaaccttc ctgggggttg tgaaactgtg attgtgttat aaaaagtggc tcccagcttg1140
gaagaccagg gtgggtacat actggagaca gccaagagct gagtatataa aggagaggga1200
atgtgcagga acagaggcgt cttcctgggt ttggctcccc gttcctcact tttccctttt1260

```

```

cattcccacc ccctagactt tgattttacg gatatcttgc ttctgttccc catggagctc1320
cgaattcttg cgtgtgtgta gatgaggggc gggggacggg cgccaggcat tgttcagacc1380
tggtcggggc ccactggaag catccagaac agcaccacca tctaacgggc gctcagagga1440
agcaccgggc ggtttgggcg aagtc                                     1465

```

<210> 109
 <211> 1488
 <212> DNA
 <213> homo sapiens

<400> 109

```

cggccggagg agcaggatgg agatccctgt gcctgtgcag ccgtcttggc tgcgccgcgc 60
ctcgcccccg ttgcccgagc ttccggcgcc cggacgcctc tttgaccagc gcttcggcga 120
ggggctgctg gaggccgagc tggtgctgct ctgccccacc acgtctegccc cctactacct 180
gcgcgcaccc agcgtggcgc tgcccggtggc ccagggtgcc acggaccccg gccacttttc 240
ggtgctgcta gacgtgaagc acttctcgcc ggaggaaatt gctgtcaagg tgggtggcga 300
acacgtggag gtgcacgcgc gccacgagga gcgcccggat gagcacggat tcgtcgcgcg 360
cgagttccac cgtoctacc gcctgcccgc tggcgtggat ccggtgccc tgacgtccgc 420
gctgtcccc gaggcgctcc tgtccatcca ggccgcacca gcgtcgggcc agggccccacc 480
gccagccgca gccaaagtagg agggggctgg gccgcgccc caccgccgga gcctcctcag 540
gtccctctta ttaaagccga tctgactccg cccagccaga tgtcccagat gcgccaaaga 600
ctgtcctctc acccactcct ggattctgcc ctgacctcca tccaggacac tgccttgata 660
acatagacc ttccactgac accctcgctc tcagagcccc tccagctttc cgaccccaca 720
ccgacaactc cccggttcc agaccctacc agcactacc taacctcag ccgacagtct 780
cagccccacc gacccacttt cttggcatat agccccactt aagacccctc ctctacttcc 840
ttctgagtcc tctacaaaga catccgggta ctacatttcc atcccttccc tattttgaca 900
ccaaattatg gtgtagacag ccctggccca acccagggc agtcaggcac aatcccccca 960
cccccaaac gtcctggact gcacagacct cccactccag accatccagg cctggttccc1020
aagacccgat ccttcccctg caaccagaca gtctacaact gccccctcca gccatttttc1080
tgccgtgaaa cccagccag ccacaccaga ctctggaacc ctttttcgac tgccccaact1140
cttggaacac agggcaacta gaacacccaa caccaaactg tacagactct cccacccccaa1200
cctccccaga ctctgcacgg atgtcctagg cccctcccc aactctaacc agacccccat1260
ccctaagtc ccttgtctt gacccccaa gcttcaacca gatctctcg gcaacccacc1320
tcccaccctc ctctcttct ccttcaagac ccaactgagc acccgctctg attccccaca1380
gcctttctcc ctgccaccac tcccttagtc tttcccaggc ttactctccc aataaatgtg1440
ctagagctct gccaaaaaaa agaaaaaaa gtcgacgcgg ccggaatt                                     1488

```

<210> 110
 <211> 783
 <212> DNA
 <213> homo sapiens

<400> 110

```

aacatattgt tgaaaggtaa tttgagagaa atatgaagaa ctgaggagga aaaaaaaaaa 60
aaagaaaaga accaacaacc tcaactgcct actccaaaat gttggtcatt ttatgttaag120
ggaagaattc cagggtatgg ccatggagtg tacaagtatg tgggcagatt ttcagcaaac180
tcttttccca ctgtttaagg agttagtggg ttactgccat tcaattcata atccagtagg240
atccagtgat ccttacaagt tagaaaacat aatcttctgc cttctcatga tccaactaat300
gccttactct tcttgaatt ttaacctatg atattttctg tgccctgaata tttgttatgt360
agataacaag acctcagtgc cttcctgttt ttacatttt ccttttcaaa tagggcttaa420
ctcagcaact cgcttttaggt cagcagcctc cctgaagacc aaaattagaa tatccatgac480
ctagttttcc atgcgtgttt ctgactctga gctacagagt ctgggtgaagc tcacttctgg540
gcttcatctg gcaacatctt tatccgtagt ggggtatggt gacactagcc caatgaaatg600
aattaaagt gaccaatagg gctgagctct ctgtgggctg gcagtcctgg aagccagctt660
tcctgcctc tcatcaactg aatgaggtca gcatgtctat tcagcttcgt ttatttttca720
agaataatca cgctttcctg aatccaaact aatccatcac cgggggtggg ttttaagtgg780
gct

```

<210> 111
 <211> 1045
 <212> DNA
 <213> homo sapiens

<400> 111

```

tctgttctgt ggacaactgt tactgttctt ccgtggccaa ccatggcggc caccagccct 60
acccccgtct cggccacttt ccctggacag tgccctcgca ggagtactca caccgctcc 120
cgcccacacc ctccgtcccc cagtcccttc ccagcctggc ggtcagagac tggcttgacg 180
cctcccagca gcccggccac caggatttct acaggggtga tgggcagccg tccaccaaac 240
actacgtgac gagctaacgc cacgcaggcg gcggggcgct ggggaatctt cctccccagc 300
ccccgggctc gggagttatg catccagaga cctgcccttc taccttcttc gcctccccctc 360
ttcctcatto cattgccccca ggtcttttcc ttttgatttt tgttttggtt ttggctttgt 420
ttttgatttt tttttattat gaatctcctg gacgcagagg tgacagtggg agctggcctg 480
ggccaggacg gcaggtggcc ctggagatgg gaaagtgtct gtgtcgaggc gctgagctct 540
ctctctgttt ctctcttttt cctctactcc tcccccttca ccccccgctg gctggaagga 600
acctcggctt ccctgaaagc ttgggggtcc cacccttctt accccacccg ggaggaacgc 660
ccagggcccc gggcttgttt ctctcttctg tttccttttg ggcagtttga tctactgatcg 720
agtaaggaat gaccttttaga ttgtgcgact tttgtttttg tttttttaaa tttttttaaa 780
ccaagaatga tttctcctgc ttcttctctc tcaccatctt cccagacgga gttcaaagcg 840
cacttctcaa gcagcttttg gcaccttcag cctcagagtg gaatctttta aagacaggac 900
ccctatgtcc aggaagggg aaaaggaact ttgccaatga tagtgaccac agcaaaagca 960
aataataata atattaataa taataaaaaga gaaaaaaaaa aatagaataa aaaaccaata 1020
gcacagcccc ttgttgaagg tccag 1045

```

<210> 112

<211> 1386

<212> DNA

<213> homo sapiens

<400> 112

```

cacactcact gccatgaag gaagaggggg caagtgtacc gaggaagggg atgcctcaca 60
gcaagagggc tgcaccttag gttctgacct catctgcctc agtgagagcc aggtttctga 120
ggaacaagaa gagatgggag ggcaaagcag cgcggcccg gccacggcca gtgtgaatgc 180
agaggagatc aaggtagccc gtattcatga gtgtcagtg gtggtggagg atgctccaaa 240
cccggatgct ctgctgtcac acaaagatga cgtgaaggag ggagaagggt gtcaggagag 300
tttcccagag ctgcccctcag aggagtgaag gggacaattt ggctgaagtc tttctctgaa 360
aaaagccaaa gggttatagg ggtacactta ggggttgcat gcaagctgtt accaaaaaat 420
ttttaagtat tttcttaatt tgaataataa aaccagagga aatgcataca gggcatgagc 480
aactgaggca aacctttgtg gacatgaatt gttctacgat gaatttttgc tttagtattt 540
taataagaat tacaaagaca atggcatact tggggtgaga gggagctgag gatgtctgag 600
gagggaaatg tattgcaggg aagactgaga aaacagtagg atgacagttt tgagtatact 660
ctgcactttt caattgtgca atcttcttgt gcactttaag gctttttaat tttgtttgag 720
aatgcaaagc tatactgtaa gtctaccttt actatctact atgcctactt caccatctct 780
taaggactcg gcatttgtcc acagtcagac tgcaagagag ggtaggtcat gaacagtcac 840
ccgtgctggc tgtagcccc acagaggcaa tcatgcccaa tagattcaag agaagctaag 900
cggaaaatgga ggggtgaagg tgtgatctgt gggactgtct gggcctgtta ctcatcctgc 960
tatcaatttc ttatttaata atcttgatga ttcttattaa ttaatcacat ttgcaggaaa 1020
ttcagatggg gcaagaaaat tttattggcc tgggttaagac tgaaagcatt ccaaattagg 1080
cttagactgt gcaaagggct tagctaagtt atcgagctta aaaccctca attaaacaaa 1140
cattatttga acagttactg catgccacgc actgtgttgg gcttagtaat aaaaaaaga 1200
aaagataagt gcttgttcta gcataaatta aaagggtccaa gggaatttaa tctggaagag 1260
aacatatgcc aattttttaa ctatgacagc ttttttttcc tctttccatt caaataggcc 1320
cgggttcagt ccagaaggg caaaaaatga atgaataaat aaataaatga ataaagacaa 1380
aaaaaa 1386

```

<210> 113

<211> 1747

<212> DNA

<213> homo sapiens

<400> 113

```

ccagtctgtg agcccttgtc ctgtgggtcc ccacogtctg tcgccaatgc agtggcaact 60
ggagaggcac acacctatga aagtgaagt aaactcagat gtctggaagg ttatacgatg 120
gatacagata cagataatga cacctgtcag aaagatggc gctggttccc tgagagaatc 180
tcctgcagtc ctaaaaaatg tcctctcccg gaaaacataa cacatatact tgttcagggg 240
gacgatttca gtgtgaatag gcaagtttct gtgtcatgtg cagaagggtg tacctttgag 300

```

```

ggagttaaca tatcagtatg tcagcttgat ggaacctggg agccaccatt ctccgatgaa 360
tcttgccagtc cagtttcttg tgggaaacct gaaagtccag aacatggatt tgtggttggc 420
agtaaatata cctttgaaag cacaattatt tatcagtgtg agcctggcta tgaactagag 480
gggaacaggg aacgtgtctg ccaggagaac agacagtgga gtggaggggt ggcaatatgc 540
aaagagacca ggtgtgaaac tccacttgaa tttctcaatg ggaaagctga cattgaaaac 600
aggacgactg gacccaacgt ggtatatccc tgcaacagag gctacagtct tgaagggcca 660
tctgaggcac actgcacaga aaatggaacc tggagccacc cagtccctct ctgcaaacca 720
aatccatgcc ctgttccttt tgtgattccc gagaatgctc tgctgtctga aaaggagttt 780
tatgttgatc agaattgtgtc catcaaatgt agggaagggt ttctgtctga gggccacggc 840
atcattacct gcaacccccg cgagacgtgg acacagacaa gcgccaaatg tgaaaaaatc 900
tcatgtggtc caccagctca cgtagaaaat gcaattgctc gaggcgta ca ttatcaatat 960
ggagacatga tcacctactc atgttacagt ggatacatgt tggaggggtt cctgaggagt 1020
gtttgtttag aaaatggaac atggacatca cctcctattt gcagagctgt ctgtcgattt 1080
ccatgtgcga atgggggcat ctgccaacgc ccaaagctgt gttcctgtcc agagggtgg 1140
atggggcgcc totgtgaaga accaatctgc attcttccct gtctgaacgg aggtcgctgt 1200
gtggccctt accagtgtga ctgcccgcct ggctggacgg ggtctcgctg tcatacagct 1260
gtttgccagt ctccctgctt aaatggtgga aaatgtgtaa gaccaaaccg atgtcactgt 1320
ctttcttctt ggacgggaca taactgttcc aggaaaagga ggactgggtt ttaaccactg 1380
cacgaccatc tggctctccc aaaagcagga tcactctctc tcggtagtgc ctgggcatcc 1440
tggaacttat gcaaagaaag tccaacatgg tctgtgggtc tgtttagtaa acttgttact 1500
tggggttact ttttttattt tgtgatata tttgttatc cttgtgacat actttcttac 1560
atgtttccat ttttaaata gctgtatatt tctatataaa aattatatta aatagatgct 1620
gctctaccct cacaaaatgt acatattctg ctgtctattg ggaaagtcc tggtagacat 1680
ttttattcag ttacttaaaa tgatttttcc attaaagtat attttgctac taaataaaaa 1740
aaaccgc

```

1747

<210> 114
<211> 1526
<212> DNA
<213> homo sapiens

<400> 114

```

cgagcccaca ggccccggag tagcagcggg gaggccggga gcccgcgggc cggagccgcc 60
cggccgagggc gtgggggctg cggggccggc ccatccgtgg gggcgacttg agcgttgagg 120
gcgcgcgggg aggcgagcca ccatgttcag ccagcagcag cagcagcagc tccagcaaca 180
gcagcagcag ctccagcagt tacagcagca gcagctccag cagcagcaat tgcagcagca 240
gcagttactg cagctccagc agctgctcca gcagctccca ccacaggccc gttgccatgg 300
tgtcagcggg ggtccccgcg agcagccaca agcagcgtt ctgaatctcc agggcaccaa 360
ctcagcctcc ctcccaacg gctccatgag gcagagagct ttgcttttac agcagttgca 420
aggactggac cagtttgcaa tgccaccagc cacgtatgac actgccggtc tcaccatgcc 480
cacagcaaca ctgggtaacc tccgaggcta tggcatggca tccccaggcc tcgcagcccc 540
cagcctcaca cccccacaac tggccactcc aaatttgcaa cagttctttc cccaggccac 600
tcgcccagtc ttgctgggac ctccctcgtg tggggctccc atgaaccctt cccagttcaa 660
cctttcagga cggaaacccc agaaacaggc cgggacctcc tcctctacca cccccaatcg 720
aaaggattct tcttctcaga caatgcctgt ggaagacaag tcagaccccc cagaggggtc 780
tgaggaagcc gcagagcccc ggatggacac accagaagac caagatttac cgccctgccc 840
agaggacatc gccaaaggaaa aacgcactcc agcacctgag cctgagcctt gtgaggcgtc 900
cgagctgcca gcaaagagat tgaggagctc agaagagccc acagagaagg aacctccagg 960
gcagttacag gtgaaggccc agccgagggc cggatgacag taccgaaaca gacacagaca 1020
ccagacctgc tgcctgaggg cctggaagcc caagtgtctg cacgattcca gccacgggtc 1080
ctgcaggtcc agggccaggt gcagtcacag actcagccgc ggataccatc cacagacacc 1140
caggtgcagc caaagctgca gaagcaggcg caaacacaga cctctccaga gcacttagtg 1200
ctgcaacaga agcaggtgca gccacagctg cagcaggagg cagagccaca gaagcaggtg 1260
cagccacagg tacagccaca ggcacattca cagggcccaa ggcaggtgca gctgcagcag 1320
gaggcagagc cgctgaagca ggtgcagcca caggtgcagc cccaggcaca tttcacagcc 1380
cccagggcag gtgcagctgc agctgaggaa gcaggtccag acacagactt ttccacaggt 1440
gcacacacag ggcacagcca agcttccagg cacagggagc ttcttccggg cgcggtgttc 1500
agtttcaggc caccaggggc agggcc

```

1526

<210> 115
<211> 1205
<212> DNA
<213> homo sapiens

<400> 115

```

cccgagaaaa accaatttaa tgccttctgtt ctcagcattt cacagcatgc aggactcaaa 60
tggatacaac agaagaaaaac aacccacaaat ttttggaaaa ccctttgtcc aatgattcat 120
atthttgatat ctattgacaa tcccttagaa ctttaaactc caaaaacaaa aaagtactgt 180
ggatctccct cgagccgaat tccggtcgag ggcgggtcacc tggagatgag aaaggccgc 240
ggggggggacc atgtgcctgt gtcccacgag cagccgagag gcggggagga cgctgctgcc 300
caggagccca ggcagaggcc agagccagag ctgggggtca aacgagctgt cccggggggc 360
cagaggccgg acaatgccaa gcccaaccgg gacctgaaac tgcaggctgg ctccgacctc 420
cggaggcgac ggcgggacct tggccctcat gcagagggtc agctggcccc gagggatggg 480
gtcatcattg gccttaaccc cctgcctgat gtccagggtg acgacctccg tggcgccctg 540
gatgcccagc tccgccaggc tgcgggggga gctctgcagg tgggccacag ccggcagctt 600
agacaggcgc ctgggacctc agaggagtcc tagcacctgc tggccatgag ggccacgcca 660
gccactgccc tccctggcca gcagcaggtc tgtctcagcc gcattcccagc caaactctgg 720
aggtcacact cgcctctccc cagggtttca tgtctgaggc cctcaccaag tgtgagtgc 780
agtataaaaag attcactgtg gcctcgtttc cagaatgttc ttgctgtcgt tctgttgcag 840
ctcttagtct gaggtcctct gacctctaga ctctgagctc actccagcct gtgaggagaa 900
acggcctccg ctgagagctg gctggtgcac tcccaggctc aggtctggggg gctgctgcgt 960
ctgtggtcag gcctcctgct cctgccaggg agcacgcgtg gtcttcgggt tgagctcgcc 1020
cgtgcgtgga ggtgcgcata gctgctcatg gtcccaacac aggtctactgt gagagccagc 1080
atcccaacccc acgcttgagc tgactcagaa tgataattat tatgactgtt tatcgatgct 1140
tcccacagtg tggtagaaaag tcttgaataa acacttttgc cttcaaaaaa aaaaaaaaaa 1200
aaaaa 1205

```

<210> 116

<211> 3968

<212> DNA

<213> homo sapiens

<400> 116

```

ggattttcta aacataaaag aggagaatta agtcagctgc agaacaatgg ggctgattct 60
tctgcttttt ctctggaaaa tctttcattg cttttgggtg aaatttacct agaggttaca 120
accacaggat gtagcttggg ctcttatttg cctttttggg aaaccaatta agattaatac 180
aggataaaag aaaaaagcaa tctattcatt atataacaca gttgtttgta ttacttggtc 240
cctgcaaagg aaatctgttg aatgcttgca ttttgaattc ttttctaata gaacaaccaa 300
aaaaggcttc ttatggtgca gcaggaaaaa agatcatttt tatagctttg cattcttaac 360
atagcattta aagagcgcca tgaattagag gaaagacatg gaacacacag gtagtcgggt 420
tgagatcatc ggctttaaag tatcctagga tggtaatgat ccagaagtat ttccagttgt 480
ctagtgggtg ggtatgcagg aatgagaagt gttttctttc catttctgtg tggacagggtg 540
gcaatcttag cagagccact atttggagtt gataactaaa gatgcaaata acatgactat 600
gccttctggg catcctagga ctatttggag ttctccaaaa ccttgtaaga ggcattgtcag 660
gcattgcagta aaagcatcta caacttcagc tgggcactgg cagcataggt ctcatcttgg 720
accatcacct cccactttat agaagagggt ggaagttctc caaaacaata tccacaacaa 780
agtctgacct cactctgagg gagatgggaa gtggggaggaa gaaggactaa ccagctccct 840
ggagtaagag gaatttgctt tccctgtctg cccaccaggg gctatatgtg ccacctttca 900
ggttggggcc aaggaaagtga tgtcagtggt acagaaggga gaggtagacc tccagacgtc 960
agcctccctc ccatggggta cattttcaat ctgagtggtg ttgccttagc tgtgttggtg 1020
ttagcttgat tgggtgggtc gctgggttat aggtgtaggg aggcagtttt tgtttagttt 1080
ttaggacttt gcctcttctc ttgtccttag cataatttct aggcagagca tccacgaagt 1140
cggttttcat tgccagctca agagcgacaa tcatttacga gttcctatgt tatgttaggt 1200
gccttatgta tattatccca aatccactgc atggttttaa tacaggcact ggaatataaa 1260
tgaaaaaggt cattacagtc actgactttc tgcaggacct taaacatttc tctttccaca 1320
agtttccctc taatcatgtg tcaaacctct ctctctgacg ggaatgttgt gctataatga 1380
atctgcataa cgcttgggat tctaggagga aggaaggttc catggacatg taagtacagc 1440
atattccctc cagcttctca ggaggcgaga gtgaattcca gaactggtaa gattgggaat 1500
ctgagcattg ccactttaat cttagaatat ttatcatttt gacacatcct gttttttaga 1560
gaggaaaaaa aacacagttt ctgcattggg agtgtaaagc ataccttggt aggaacgtgt 1620
tttgtaagac acatttgggt tgtcatttca gagcatgtca aactttgtac ttcaaaatat 1680
atthtagtat attgttagtg gtaacatata tcaaggcttt gaattaaact ttttatttaa 1740
ttttcacaag aagcacttat tttagccata ggaaaaccaa tctgagctac aaatagttct 1800
ttaaataaag ccagggttat ttagctattc tagaaagtgc cgacttcttt caagaagcag 1860
gcattgttag acagctgaga attatcacat agcctaaatt ctagcctggc agcaagagtc 1920
acatctgaga tgtccaaaaa aaaaaaaaaa aaacacctga tctacattga aagggggtag 1980
actaacgtat gtgagaccat tttcctattt gcagttacaa gggttaaagaa ctttgaaggt 2040

```

cattcggctg ctaagaggca tgtcgaacac tctgtgtggc tctttcacag taaacctcc2100
 taagagcaga agacacatgg ctgttagtgt ctgcgttttag atttaatttc tcaaataaag2160
 gcccttgggt gcgtatcatt tcatccagtt ataaactagg gtccttgcaa gcacccccat2220
 tctaagggtg aattattgaa atcagttgct atttgatgag tcacaactgg ccagcaggc2280
 agggcatttg aagtcattgg catcaaaaag aaatgattgt tttttgaaaa gctaaatgct2340
 taaaatgctt ctagaggga gtcgtggggc gtgtgctcat tctctttaa atcagggttg2400
 ttgagtttgt ttttaaacat ttttataagt tcatgagaaa aaatatataa attcctaagaa2460
 ccaacactgt attcccagaa acatgacctt cgctgggtctt ggggtccacat atcattggac2520
 tctgggggac acaaagatgc ctgtgacact ttggtgttgc cgagttagtc aacaattatt2580
 ctgggaaaaa gcagaattga attcttctct agatgtccta ccagggttgg ccaagggcc2640
 caaagcaggc taataaattc ccacaggatc cagacaccag gcaaaattgc tctaagaagc2700
 cagttactgt catccctcta tgggttctaga aaaaatagta caaaaatgac aggtcatcct2760
 atgagcgtca tgccaatgaa accccatctt ctggagaagc ccttgaatca gaattatctt2820
 ttttcttgat gtcgtcagat gcagccagtt tcttaatttt tttaaaaact gtatgtttct2880
 gtggtatgta tatttgtaca cctaactacc tggcacttgg aaatcacagc actactcaga2940
 ggcaattgaa taaagagaaa ttttaattta aatatcaagt cctgtcaaac atttctcaaa3000
 cttctgattt tatcaaaggt ttgccagcca ataaagtgc tcccaagtat acaggggaga3060
 aagctagact cctacagggt cctagagttt aagtaatttt tttgttatta atataggtaa3120
 taatttttct aatttttatt ttttggttcc aaatgtaaag ctoccttgtt ttacctctgt3180
 ttatgtcatt cttgacatgt ttatctaaat tatgtgtgct ctgtgacagg tgaaatgtaa3240
 atctgggatc catagtcaag atattcataag gacctacttc ccagcctacc tttcttctc3300
 tacctgataa tgataatact caaaataaca acattcaaa gaaacacaaa gaaatcctgc3360
 tttcacatct cctatttctt gggctcctta ataactactg atggtttgtt catgaaaaaa3420
 aattttttaa tcaaaagatt gtacttggcc ctgagttgaa aaaatttcaa aaatcaaaag3480
 tttgtacttg gccctgagtt gaaaaaaaaa attcacattc taagaataaa cagaaaaatg3540
 ttcttcttgg aagtaaataa caaaagccat agtgttttca tttgtctttt cttcaggata3600
 cacggtagaa gtcagagaat ctttgatact tttatttgg gcaataatca aggccatgca3660
 acaaccacaa atcaagcatt ttggttcaag tcaggatgac atgagtgggg acagaagctg3720
 tggcagtcac tcaaataatc tcatgggtcc tgaggaaaag acaggagtta acgtattaag3780
 tttctactat atgcaggaac tgtgttaaat attttacata agttttgata atagctaaca3840
 ttagctgagc acaaaatttg ggccctgatt tgtgctgagt atctttcaca gattactgct3900
 tttaatcagc agtccttgtg agctaggtat gatcattatc cccatttata gattacggat3960
 gagattcg

3968

<210> 117

<211> 798

<212> DNA

<213> homo sapiens

<400> 117

gtaatgggaa atttgggtgt ctgaatcttc ttcctaggat attgatatat tccacgcttc 60
 tagtgggtat tctgggaatt ttaccctgct cagtatttgc cctagggtac tagaaagagg120
 agattgtcca aacttagcag tatggtccat ctctgttaga agtggaaatg tcatacaggal80
 tagcaaacac tcttgggtcc tttttgccca ggcttgccca gagccggcaa cagcaacaaa240
 atgtggagga tgcaatgaaa gagatgcaaa agcctctggc ccgctatatt gatgacgaag300
 atctggatag gatgctaaga gaacaggaaa gagaggggga ccctatggcc aacttcatca360
 agaagaataa ggccaaggag aacaagaata aaaaagttag acctcgctac agtgggtccag420
 cacctcctcc caacagattt aatatctggc ctggatatcg ctgggacgga gtggacagat480
 ccaatggatt tgaacagaag cgctttgcca ggcttgccag caagaaggca gtggaggaa540
 ttgcctacaa atggagtgtt gaggatatgt aactttcctg aggctgtggg ggtggctggg600
 ctgtggtagt gggcataggc agcgagatat ccagtggtaa cagttgtctg tgctaataat660
 tggagcccac acagaccagc aacttgttga atgccagttt tgaccacaga agaataattcg720
 agacctgatg tttggattga ggtacctgta cttcttgggg tgttgacagc agcgggtgtt780
 ggtgggtttt cagaggaa

798

<210> 118

<211> 1068

<212> DNA

<213> homo sapiens

<400> 118

cccctctctg tgactcagtc tctgagcgtt ttaatacgat ggtgtccccg cgggatcaaa 60
 cttcagcgtc acagctgagg actggcttcg tggctccctga tgggagagca tgaacagggtg 120

gtatgtgaag	cccttggaga	ccagctcttc	caaagtcaaa	gccaagacca	ttgtgatgat	180
tcccgaactcc	cagaagctcc	tgcgatgtga	acttgagtca	ctcaagagcc	agttacaggg	240
ccagaccaag	gctttcagag	tcttgaacca	ctcagtgacc	atggttgaga	aggagagctg	300
cttgacagcaa	atcaagattc	agcagcttga	agaggtgctg	agccccacag	gccgccaggg	360
agagaaggag	gagcacaagt	ggggcatgga	gcagggcccg	caggagctgt	atggggccct	420
gacccaaggc	cttcaggggc	tggagaagac	cctgcgtgac	agtgaggaga	tgcagcgggc	480
ccgcaccact	cgctgcctgc	agctgctggc	ccaggagatc	cgggacagca	agaagtctct	540
gtgggaggag	ctggaactgg	tgcgggagga	ggtgaccttc	atctatcaga	agctccaagc	600
gcaggaggat	gagatctcag	agaacttggt	gaacattcag	aaaatgcaga	aaacgcaggt	660
gaaatgccgc	aaaatcctga	ccaagatgaa	gcagcaggg	catgagacag	ccgcctgtcc	720
ggagactgaa	gagataccgc	aggagccagt	ggctgctgga	aggatgacct	ccagaaggaa	780
ctgagtata	tatggtctgc	tgtgcacgtg	ctgcagaact	ccatagacag	cctcactttg	840
tgctcggggg	cctgtcccaa	ggcctcgagc	ctaagaggcc	acaaggggca	ccagtgcctg	900
agccctccac	tccctcctg	ggactctgac	tccgactctg	accaggacct	ctcccagcca	960
cctttcagca	agagcgcgc	ccccttccca	cccgtttgag	cagccgggac	tgctctccct	1020
gaagaccct	ccagagagaa	aataaactag	cccagacct	cctctaaa		1068

<210> 119

<211> 4584

<212> DNA

<213> homo sapiens

<400> 119

ctcgagccgc	tcgagccgcg	gaagtaattc	aagatcaaga	gtaattacca	acttaattgt	60
tttgcattgg	acttttaggt	aagattatct	tttaaactct	gaggactagc	attaattgac	120
agctgaccca	ggtgctacac	agaagtggat	tcagtgaatc	taggaagaca	gcagcagaca	180
ggattccagg	aaccagtgtt	tgatgaagct	agggcttggg	gcaagagggc	aagcagcagt	240
tggtggtgaa	gataggaaaa	gagtcaggga	gccagtgcga	tttgggtgaag	gaagctagga	300
agaaggaagg	agcgtaacg	atttggtggt	gaaaagagga	attgggagtg	gtaggatgaa	360
acaattttgga	gaagatagaa	gtttgaagtg	gaaaactgga	agacagaagt	acgggaaggc	420
gaagaaaaga	atagagaaga	tagggaaatt	agaagataaa	aacatacttt	tagaagaaaa	480
aagataaatt	taaacttgaa	aagtaggaag	cagaagaaaa	aagacaagct	aggaaacaaa	540
aagctaaggg	caaatgttac	aaacttagaa	gaaaattgga	agatagaaac	aagatagaaa	600
atgaaaatat	tgtcaagagt	ttcagataga	aaatgaaaaa	caagctaaga	caagtattgg	660
agaagtatat	aagatagaaa	aatataaagc	caaaaattgg	ataaaatagc	actgaaaaaa	720
tgaggaaatt	attggttaacc	aatttatctt	aaaagcccat	caattttaatt	tctggtggtg	780
cagaagttag	aaggtaaagc	ttgagaagat	gagggtgttt	acgtagacca	gaaccaattt	840
agaagaatac	ttgaagctag	aaggggaagt	tggttaaaaa	tcacatcaaa	aagctactaa	900
aaggactggg	gtaattttaa	aaaaactaag	gcagaaggct	tttggaagag	ttagaagaat	960
ttggaaggcc	ttaaatatag	tagcttagtt	tgaaaaatgt	gaaggacttt	cgtaacggaa	1020
gtaattcaag	atcaagagta	attaccaact	taatgttttt	gcattggact	ttgagttaag	1080
attatctttt	aaatcctgag	gactagcatt	aattgacagc	tgaccaggt	gctacacaga	1140
agtggattca	gtgaatctag	gaagacagca	gcagacagga	ttccaggaa	cagtgtttga	1200
tgaagctagg	actgaggagc	aagcagagca	gcagcagttc	gtggtgaaga	taggaaaaag	1260
tgccaggagc	cagtgcgagt	tggtgaagga	cagtaggaag	aaggaaggag	cgctaacgat	1320
ttggtggtga	agctaggaaa	aaggattcca	ggaaggagcg	agtgcaattt	ggtgatgaag	1380
gtagcaggcg	gcttggtctg	gcaaccacac	ggaggaggcg	agcaggcggt	gtgcgtagag	1440
gatcctagac	cagcatgcca	gtgtgccaa	gccacaggga	aagcagtggt	ttggtaaaaa	1500
tccgtgaggt	cggcaatatg	ttgtttttct	ggaacttact	tatggttaac	ttttatttat	1560
tttctaattt	aatgggggag	tttcgtactg	aggtgtaaa	ggatttatat	ggggacgtag	1620
gccgatttcc	gggtgttgta	ggtttctctt	tttcaggctt	atactcatga	atcttctctg	1680
aagcttttga	gggcagactg	ccaagtctct	gagaaatagt	agatggcaag	tttgtggggt	1740
tttttttttt	acacgaattt	gaggaaaacc	aaatgaattt	gatagccaaa	ttgagacaat	1800
ttcagcaaat	ctgtaagcag	tttgatgtgt	tagttggggg	aatgaagtat	ttcagttttg	1860
tgaatagatg	acctgttttt	acttcctcac	cctgaattcg	ttttgtaaat	gtagagtttg	1920
gatgtgtaac	tgaggcgggg	gggagttttt	agtatttttt	tttgtggggg	tgggggcaca	1980
atatgttttc	agttcttttt	cccttaggtc	tgtctagaat	cctaaaggca	aatgactcaa	2040
ggtgtaacag	aaaacaagaa	aatccaatat	caggataatc	agaccaccac	aggtttacag	2100
tttatagaaa	ctagagcagt	tctcacgttg	aggtctgtgg	aagagatgtc	cattggagaa	2160
atggctggta	gttactcttt	tttcccccca	cccccttaat	cagactttta	aagtgcctta	2220
ccccttaaac	ttgttatctt	ttacttgaag	cattttggga	tggtcttaac	aggggaagag	2280
gaggggtggg	gagaaaaatg	ttttttctaa	gattttccac	agatgctata	gtactattga	2340
caaaactggg	tagagaagga	gtgtaccgct	gtgctgtgg	cacgaacacc	ttcagggaag	2400
ggagctgctt	ttatccttgg	aagagtattc	ccagttgaag	ctgaaaagta	cagcacagtg	2460

cagctttggt	tcattattcag	tcattctcagg	agaacttcag	aagagcttga	gtaggccaaa2520
tggtgaagtt	aagttttcca	ataatgtgac	ttctttaaag	ttttattaaa	ggggaggggc2580
aaatattggc	aattagttgg	cagtggcctg	ttacggttgg	gattggtggg	gtgggttttag2640
gtaattgttt	agtttatgat	tgcagataaa	ctcatgccag	agaacttaaa	gtcttagaat2700
ggaaaaagta	aagaaatata	aacttccaag	ttggcaagta	actcccaatg	atthagtttt2760
tttcccccca	gtttgaattg	ggaagctggg	ggaagttaaa	tatgagccac	tgggtgtacc2820
agtgcattaa	tttgggcaag	gaaagtgtca	taatttgata	ctgtatctgt	tttccctcaa2880
agtatagagc	ttttggggaa	ggaaagtatt	gaactggggg	ttggtctggc	ctactgggct2940
gacattaact	acaattatgg	gaaatgcaaa	agttgtttgg	atatggtagt	gtgtggttct3000
cttttggaat	ttttttcagg	tgatttaata	ataatttaaa	actactatag	aaactgcaga3060
gcaaaggaag	tggcttaaatg	atcctgaagg	gatttcttct	gatggtagct	tttgtattat3120
caaacttttt	tcagataaca	tcttctgagt	cataaccagc	ctggcagtat	gatggcctag3180
atgcagagaa	agcagctcct	tggtgaattg	ataagtaaag	gcagaaaaga	ttatatgtca3240
tacctccatt	ggggaataag	cataaccctg	agattctttac	tactgatgag	aacattatct3300
gcatatgccca	aaaaatttta	agcaaatgaa	agctaccaat	ttaaagttaac	ggaatctacc3360
attttaaagt	taattgcttg	tcaagctata	accacaaaaa	taatgaattg	atgagaaata3420
caatgaagag	gcaatgtcca	tctcaaaaata	ctgctttttac	aaaagcagaa	taaaagcgaa3480
aagaaatgaa	aatgttacac	tacattaatc	ctggaataaa	agaagccgaa	ataaatgaga3540
gatgagttgg	gatcaagtgg	attgaggagg	ctgtgctgtg	tgccaatggt	tcgtttgct3600
cagacaggta	tctcttcggt	atcagaagag	ttgcttcatt	tcattctggga	gcagaaaaca3660
gcaggcagct	gttaacagat	aagtttaact	tgcatctgca	gtattgcatg	ttagggataa3720
gtgcttattt	ttaagagctg	tggagttcct	aaatatcaac	catggcactt	tctcctgacc3780
ccttccctag	gggattttcag	gattgagaaa	tttttccatc	gagccttttt	aaaattgtag3840
gacttggttc	tgtgggcttc	agtgatggga	tagtacactt	cactcagagg	catttgcctc3900
tttaataaat	ttcttaaaaag	cctctaaagt	gatcagtgcc	ttgatgccaa	ctaaggaaat3960
ttgttttagca	ttgaatctct	gaaggctcta	tgaaaggaat	agcatgatgt	gctggttagaa4020
tcagatgtta	ctgctaaaaat	ttacatgttg	tgatgtaaat	tgtgtagaaa	accattaaat4080
cattcaaaat	aataaactat	ttttattaga	gaatgtatac	ttttagaaaag	ctgtctcctt4140
atttaaataa	aatagtgttt	gtctgtagtt	cagtgttggg	gcaatcttgg	gggggattct4200
tctctaactc	ttcagaaact	ttgtctgcga	acactcttta	atggaccaga	tcaggatttg4260
agcggaagaa	cgaatgtaac	tttaaggcag	gaaagacaaa	ttttattcct	cataaagtga4320
tgagcatata	ataattccag	gcacatggca	atagaggccc	tctaaataag	gaataaataa4380
cctcttagac	aggtgggaga	ttatgatcag	agtaaaaggt	aattacacat	tttattttcca4440
gaaagtcagg	ggtctataaa	ttgacagtga	ttagagtaat	actttttcac	atttccaaag4500
tttgcatggt	aacttttaaat	gcttacaatc	ttagagtggg	aggcaatggt	ttacactatt4560
gaccttatat	aggaaaaaga	tgag			4584

<210> 120
 <211> 982
 <212> DNA
 <213> homo sapiens

<400> 120

gtggagggga	ccctgtggtt	agcagcagct	atcgcagcgt	cggatgttca	gagcagcaga 60
agccggcgctc	gtcggatgtt	gtgttgcccc	ccaccatgag	ctacacaggc	tttgtccagg120
gatctgaaac	cactttgcag	tcgacatact	cggataccag	cgctcagccc	acctgtgatt180
atggatatgg	aacttggaa	tctgggacaa	atagaggcta	cgagggctat	ggctatggct240
atggctatgg	ccaggataac	accaccaact	atgggtatgg	tatggccact	tcacactctt300
gggaaatgcc	tagctctgac	acaaatgcaa	acactagtgc	ctcgggtagc	gccagtgccg360
attccgtttt	atccagaatt	aaccagcgct	tagatatggt	gccgcatttg	gagacagaca420
tgatgcaagg	aggcgtgtac	ggctcagggtg	gagaaaggta	tgactcttat	gagtcctgag480
actcgagggc	cgtcctgagt	gagcgcgacc	tgtaccggtc	aggctatgac	tacagcgagc540
ttgaccctga	gatggaaatg	gcctatgagg	gccaatacga	tgccctaccgc	gaccagttcc600
gcattcgctgg	caacgacacc	ttcggtccca	gggcacaggg	ctggggcccg	gatgcccga660
gcgggccggcc	aatggccgca	ggctatgggc	gcatgtggga	agaccccatg	ggggcccggg720
gccagtgcac	gtctgggtgcc	tctcggtctg	ccctccctct	tctcccagaa	catcatcccc780
gagtacggca	tggtccaggg	gcatgagagg	ttggggcgcc	ttcccgggcg	gcttcccgtt840
ttggttttcg	ggtttggaac	tggcatgaag	cagatgaggg	cggactggga	agacggggac900
cacagccgat	ttgcgaacca	agaagaagaa	gagaaagcag	ggcggcattc	tgattgagcc960
agttagcaaa	gcagccggaa	tt			982

<210> 121
 <211> 742
 <212> DNA

<213> homo sapiens

<400> 121

```

ctcaacttcg cactgactgcg tgcctcaagc cgacgcagcg gcctactctc gcactgcaga 60
cggggaaact gagggccgag gcgggccggg tggggcagac ctcccggcga gcccgagccc120
ccgcccccg ctagccccgc cctggcccggt aagaagcacc cggggcgcgga ggccaaggcg180
cacagcgcg ggccaggetg ggtccagcag cgcgatggca gctcagcggc tgggcaagcg240
cgtgctgagc aagctgcagt ctccatcgcg ggcccgcggg ccagggggca gtcccggggg300
gctgcagaag cggcacgcgc gcgtcacgt caagtatgac cggcggggagc tgcagcggcg360
gctggacgtg gagaagtgga tgcagggcg cctggaggag ctgtaccgcg gcatggaggc420
agacatgccc gatgagatca acattgatga attgttgag ttagagagt aagaggagag480
aagccggaaa atccagggac tcctgaagtc atgtgggaaa cctgtcgagg acttcatcca540
ggagctgctg gcaaagcttc aaggcctcca caggcagccc ggccctccgcc agccaagccc600
ctcccacgac ggcagcctca gccccctcca ggaccggggc cggactgctc accctgacc660
ctcttgact ctccctgccc cccggacgcc gccagccttg cttgtgtata agttgtattt720
aatggttctg taacaataaa aa
742

```

<210> 122

<211> 2330

<212> DNA

<213> homo sapiens

<400> 122

```

gtttggacaa gttgttttaa taggaaatag acctgcgtgc ttcataaggtt tcctcaacca 60
cctttcctca gctttcttaa aatgggatct acattggctc ttcacacca aatagcagac 120
taatcgtttt tctgcttagc accgtctggt tcattgtctt gaactctgcc ttacagcagc 180
aagaaaatth tctcgcacaa gaacctcaat ctttagttcc attgagctcc ccctctggat 240
tttggactta ccagaagtag gaggttctga taccattcaa gatggtcttt ccttcaaagc 300
aggtctgaag aggagactac caaagcagtg tttacaaacc cagagtccac acaaccatat 360
tgcatagaac agcacttggc tttcacaagc ctccacaggg acctggtgta attggagtga 420
aagggcagag accctggaag tggaggtggc tgtgtgctgc gatgggaaga aggcagaagg 480
cccaggggct ttggacatag agcaggtggg aagctgcaag tactgggaag gaagagagtt 540
tcacagaaac aaagctttgt cacacagaaa tgagttctgt ctactgggtg acttcatccc 600
tcaggctcca gctgagcaga gatttttaac agcttccctt atgggtattg aactgctca 660
ggaagcagta gacctgtca gggacagcta ttgatctttt gtgttctgat tagattggaa 720
aatagatcaa cttcattgta gtccaggaac tgttggtcac agctactagg aatgaggtga 780
ttctgaggg ctgagaaaaa acacagaatc ttggccagca gccagcagct gcattgtgaa 840
agatgcattt acttctcctt tgagagttgg ggttgagggc aaacatagaa cccaggtttg 900
gcttacaacc cagtgtcccg gaagccctcc ttccggagaa ctgtaagtaa gaggtgggtg 960
tgtctaaaga caataccatt aatgaatggt ctggccttac ctaaaagggt ttagcaattt1020
ggggataact cttggatcta gcttatgtgc gttcacatgc acatttgcta gccagagct1080
tttaaaatga ggtctggcat atacttgatt acaaatgaaa actcagaaac caattttatt1140
tattaaatca tatctcttgg ttttccctcc ccttctaat ccccaaagg acctatttgal1200
gctgttcccc aattcatctg cttatttttg accatgaatc tgccagagtg atattttctg1260
ttattttctc tccaaattht tccctgatgt ttccaataaa gatttacttg ggtggccct1320
taaggtgaca tcaggatgct cttatgtcct tccagaataa gcatacactt cactcctctc1380
cctttcatct cctctgcat tcttaattcc ttgcttttct cacttggagc cgaggggtgct1440
ttagagaggt ggttttccat gaatcagcca agattcctgt agaagtggg tatacctatt1500
ccagtttcaa agctcctcgg ctatgctaag gtcccctcag agatgaggtt tgacttttag1560
gccgatatga ctctccata gcctggccaa ggagaccatg agtagccatg tctggttttac1620
tctttatcct gagactgttt gtttatagct taaaacagaa gtgtgtcttc ccagcacaaa1680
cctaataaat cagtgtatca gtgcatctgg tggcaacagc tcagcccatc caaagagcaal1740
ggattcagga aaggcacact gatggtgggg agcctcttaa gagcctctaa tgttctccca1800
aaaccagagt tgagagtgg agtgccagtc gtcggggccc actattcctg aataagggac1860
atgcaagggt cagaagttag ttgactctcg cctaaatate tgtgcctttg cctgtccttt1920
ctccactct actgaaaccc ggaacagatt cccgcttgcc ttctgatgaa gagaggttag1980
gtaaagagag tttggaggaa aaaagacacc agggagcagg ctgtggggta ggagaggggt2040
ctgagaggag gcagcaatcc agaatacctc cttttctagc cagcatccct tgaacttttg2100
aaaggttggt cctaccactg gctggcacac cagggcaatg atttccctgc agaaggaagg2160
aaagaatggt ttcacccctg catccttctt gggagaagct accagcctgt tgcttcagtt2220
tgagttgggt tcacattcag gattttgggg ttttatgggt tttccttctt cctgtgtttt2280
tgccccgaac gttgatcaac aggggtgaaa aagggccacc tgaggggttc
2330

```

<210> 123
 <211> 1860
 <212> DNA
 <213> homo sapiens

<400> 123

```

gaggcagttt gagatcacca gcatttccgt ggatgtcttg cacatcctgg aattcgacta 60
tagcaggctc cccaaacaaa gcatcgggca gttccatgag ggggatgcct atgtgggtcaa 120
gtggaagtcc atggtgagca cggcagtggg aagtcgccag aaggagagac actcgggtgag 180
ggcagccggc aaagagaagt gcgtctactt cttctggcaa ggccggcact ccaccgtgag 240
tgagaagggc acgtcggcgc tgatgacggg ggagctggac gaggaagggg gggcccagggt 300
ccaggttctc cagggaaagg agcccccttg tttcctgcag tgtttccagg gggggatggt 360
ggtgcactcg gggaggcggg aagaggaaga agaaaatgtg caaagtgagt ggcggctgta 420
ctgcgtgcgt gggagaggtgc ccgtggaagg gaatttgctg gaagtggcct gtcactgtag 480
cagcctgagg tccagaactt ccatgggtgg gcttaacgtc aacaaggccc tcatctacct 540
gtggcacgga tgcaaagccc agggccacac gaaggaggtc ggaaggaccg ctgcgaacaa 600
gatcaaggaa caatgtcccc tggaaagcagg actgcatagt agcagcaaag tcacaatata 660
cgagtgtgat gaaggctccg agccactcgg attctgggat gccttaggaa ggagagacag 720
gaaagcctac gattgcatgc ttcaagatcc tggaaagttt aacttcgcgc cccgctgtt 780
catcctcagc agtcctctg gggattttgc agccacagag tttgtgtacc ctgcccgagc 840
ccccctctgt gtcagttcca tgcccttctt gcaggaagat ctgtacagcg cgccccagcc 900
agcacttttc cttgttgaca atcaccacga ggtgtacctc tggcaaggct ggtggcccat 960
cgagaacaag atcactgggt ccgcccgcac ccgctgggcc tccgaccgga agagtgcgat 1020
ggagactgtg ctccagtact gcaaaggaaa aaatctcaag aaaccagccc ccaagtctta 1080
ccttatccac gctgggtctg agccccctgac attcaccaat atgtttccca gctgggagca 1140
cagagaggac atcgctgaga tcacagagat ggacacggaa gtttccaatc agatcacctt 1200
cgtggaagac gtcttagcca agctctgtaa aaccatttac ccgctggccg acctcctggc 1260
caggccactc ccggaggggt cgatcctctg aagcttgaga tctatctcac cgacgaagac 1320
ttcgagtttg cactagacat gacgagggat gaatacaacg ccctgcccgc ctggaagcag 1380
gtgaacctga agaaagcaaa aggcctgttc tgagtgggga gacgccagag gaggctcacg 1440
gtcacgtcca acaacaccac tgcaccaggg aaatggatat atatttttgg actggtgttt 1500
ttcacaaagt atttttcaat cagagttttc agaacctgac attgttaaag atactgcttg 1560
tcccgaggtt gtgtattttg taaatgttca agggaactgt ttgaaaactt ctttcacca 1620
ttcaggaggt tatcagaatt aataaaagta tctgttatgt gcacttaagc cgcagctgct 1680
atagatagca ctgccttctt gttccagcta ggcaatgcct tttttttttt tttgaagcag 1740
ttctctttat aaagtgttat tttgatagtt tgtggattct aaaataccat ataagtcaaa 1800
tatggattta acaaagcaat atgtattcat tcactttcga gatttggggg gttgtttttt 1860

```

<210> 124
 <211> 807
 <212> DNA
 <213> homo sapiens

<400> 124

```

cctttcctca tctctattaa attgtaaaca ggactactgc atgtactctc tttgaggtga 60
atttggaatg gaaggccagg gactatactc tttttaaaat agacatttgt ggggtcacaa 120
caatatatga aatagtaccc tctaaaaaag agaaaaaaa aatcaggcgg tcaaacttag 180
agcaacattg tcttattaaa gcatagttta tttcactaga aaaaatttaa tatcaaggac 240
tattacatac ttcattacta ggaagttctt tttaaaatga cacttaaaac aatcactgaa 300
aacttgatcc acatcacacc ctgtttatatt tccttaaaaca tcttggaagc ctaagcttct 360
gagaatcatg tggcaagtgt gatgggcagt aaaataccag agaagatgtt tagtagcaat 420
taaaggctgt ttgcaccttt aaggaccagc tgggctgtag tgattcctgg gccagagtg 480
gcattatggt tttacaaaat aatgacatat gtcacatggt tgcattgttt tttgcttgtt 540
gaatttttga acagccagtt gaccaatcat agaaagtatt actttctttc atatggtttt 600
tggttcactg gcttaagagg tttctcagaa tatcatggc cacagcagca taccagttt 660
ccatcctaata agggaatgga aattaatttt gtaacctact gattaacaga atctgggggt 720
cacattggaa aaaaattctt ttatccgtct ttttaaggata tgtttaaata ttattttatg 780
tgtcggcata ttgcggacag tctgaga

```

807

<210> 125
 <211> 1932
 <212> DNA
 <213> homo sapiens

<400> 125

```

ccgggggtttt gggcgtggaac tgcagcgctt agagagctcg gtggaagctg ctaaaggcgg 60
aggcgggggct ctggcgagtt ctccctccac cttcccccac ccttctctgc caaccgctgt 120
ttcagccctt agctggattc cagccattgc tgcagctgct ccacagccct tttcaggacc 180
caaacaaccg cagccgctgt tcccaggatg gtgatccgtg tatatattgc atcttcctct 240
ggctctacag cgattaagaa gaaacaacaa gatgtgcttg gtttcctaga agccaacaaa 300
ataggatttg aagaaaaaga tattgcagcc aatgaagaga atcgggaagt gatgagagaa 360
aatgtacctg aaaatagtcg accagccaca ggttaccccc tgccacctca gattttcaat 420
gaaagccagt atcgcgggga ctatgatgcc ttctttgaag ccagagaaaa taatgcagtg 480
tatgccttct taggcttgac agccccacct ggttcaaagg aagcagaagt gcaagcaaa 540
cagcaagcat gaaccttaag cactgtgctt taagcatcct gaaaaatgag tctccattgc 600
ttttataaaa tagcagaatt agctttgctt caaaagaaat aggcttaatg ttgaaataat 660
agattagttg ggttttcaca tgcaaacatt caaaatgaat acaaaattaa aatttgaaca 720
ttatggtgat tatggtgagg agaattggat attaacataa aattatatta ataagtagat 780
atcgtagaaa tagtgtgtt acctgccaaag ccactcctgta tacaccaatg attttacaaa 840
gaaaacaccc ttcctctcct ctgccattac tatggcaact taagtgtatc tgcagctcta 900
cattaaaaag gagaaagaga aataacctgt ctctcattcc taagtgcctt cattaatttt 960
catgaacaag aatatgtacc tttttgatgc tatattactg cgattaaaaa gttcttgcag 1020
gtaatgttta tgatatgtaa aacgttgtaa tttcttatcg taattataac attcccattc 1080
ttttgtagat gaaacttcta catattgaac cacagatttt ctgagcttct aaatgtagcc 1140
tttcattgca catttcagt atcagaatag atatcctttt acacgcacaa aagcaataga 1200
ttcattcagt ggacaagttc cttgttttaac tacacagcta tgatggaatg atatatccaa 1260
gttccttgcc tcagtgaat atgcatatgt atatcatgaa agtgggatgc caagtaagct 1320
taaaatggca ttctctagca aagagattag actttttaa atactcttata aaacaggttg 1380
gcgactattt cccaagattg gtttcccttg agtttttgct aaaacaaatc ttagtagttt 1440
tgcccgttta aaacaactca caatcgtaaa tgctactatt cctaagatat cttacctttt 1500
tatttcagtt tagccatgta ttgtatgagt gtattagtct aagcagtgag aatcttttct 1560
atgcctctat tccagcaaaa agtagaagta tcaaataaaa agggcaactt ttaaaatatt 1620
aagcctgaag acttctaaaa agacaagaaa catggcctaa ataaccaaca tagatttaca 1680
tagtaagttt cacactacct tattacaaaa agcaaacacc tcttacttta aactacatta 1740
tcattgtat ctattgtatg ctggtcttta ctttttgcca aaatcaacat ataatgaaga 1800
gatgcctttg tttcatgaga ttcaaacttg atgctatgct ttaaaataaa ctcagtactt 1860
ttagaaacat aaaaaaaaaa aaaaaaggc gacccccga gtagtgggcc cgcgcccggg 1920
gatttttccg gg 1932

```

<210> 126

<211> 3024

<212> DNA

<213> homo sapiens

<400> 126

```

atatatgtta agacattccc ttgctaatta ttttcttctc tgttgttcta ttttttgggt 60
ccagtttgct gtttttaaaag ttttgagtc cagctgggtc tgtacattta actgaaaaaa 120
aagtaactta aaataatata aaaatagcac tcatgtatgt cctacagtta taggtgaaat 180
ttgatattgt ttgtcttaca tagcatacct atagacagct taagtaaagt gactgttaag 240
agggttatgc ttattgatga actctttagt ttgtttacca gctctgttag tatagttaaa 300
ttgatctcag tagcttcaag tattttataaa atgggtgaag tccaaatata tgtgataatt 360
acaatacact ttgaattaat ggggggtggg ttggaagttt aaatgcattt tatttacc 420
aggagtatgt taaaatgata gttataaatg ttggaagttt aaagcaagat actcagttta 480
gttctttaca aatcataaga agaacaaaat tagatgttga cattgctatt ttaggctgtg 540
tgttttccat atgcttcttg ctttccctgt cacaggtggt ggcagcaata ttggtgtgat 600
tgaggttatg ctggcaccac tcgcacacag ggcgacaatg gtgttagctg ggcagaaaga 660
gtggcatctc tggctaccgg gctgggggcg acctttacca taggatgaag taaccttgca 720
ttcggctgca aggtgtactg tacgtacaca ggtgctggtc gatgtccact ttctgctttt 780
ctttctttct tttttctttt tttaaagtaa ttcccccac agtaaaatc actgactcct 840
gagtaaatgt attttccagt tttatggaat tgggagctcg acaagtgaac ccaattta 900
gtaaagtatt tggctttcaa atgggttctc tgtgctatct tttggaattc tttcagattc 960
cagagatatc ttacgtcttt gattcaattt aaaaatttga cttattttct tttagaaata 1020
atgtattgtg tctgtgcacc aaaaaaaaaa ccaaaaagga ttgctttact ccaagaggag 1080
agattgtctt aggataaacc tccaagctca cacttaatat aacagactga agtaaacatt 1140
agaatcctgt ttagagctat tctgcacagt taactactga tctttagaat ctaaaattgt 1200
atatgaactt attcttaaat aattgaaccg ttttatattc aaatgactta tgatcgtggt 1260

```

```

tagtttggga aaaataagat gggttaaattt tgattttattg aaatgtaatt gtattattttt1320
cataaaatag catttttcatt ttgtaatgtg gtttaacatc cttgttggtt gccaaagaaa1380
tttcatttgg ctgtgaatat tctatttgct tgcagtatct gtttctcttc ctagggtcaa1440
gttgggtgacc caagcctatt gtaaacaagt gattatctca aaggagatg ccaatggagt1500
aacaatttgt taacctttacg ttttctgtct gtatattttt ttaaaaatct ggtagtttct1560
ggaaaaaaa gagaaggggg tttgtagtac ttaaccctat ttatttccgt atatttttagt1620
taattagttt ttggaataaa tggatttcag tatagctttg tgggttaaatt gcattgcctt1680
tattttatgt ttaggcttat ttttaaatta acatttaaca gaaacatttg aaatagaatt1740
tgcattgtctg ccttaattaa cttaaagact gattttaatc tgactatgac actgagcata1800
ttcttttaaat tactcataat ttataatgct taatataatc ttaattaaat ttagcagttt1860
tagtataaga tgtgccattt tgtcctctgt atgtctgaat gaagctataa catttgcctt1920
tttattgcag gttttccttt ggaatatgga taaatacacc atgatacgga aactagaagg1980
acatcaccat gatgtggtag cttgtgactt ttctcctgat ggagcattac tggctactgc2040
atcttatgat actcgagtat atatctggga tccacataat ggagacattc tgatggaatt2100
tgggcacctg tttcccccac ctactccaat atttgcctgga ggagcaaattg accggtgggt2160
acgatctgta tcttttagcc atgatggact gcatgttgca agccttgctg atgataaaat2220
ggtgaggttc tggagaattg atgaggatta tccagtgcga gttgcacctt tgagcaatgg2280
tctttgctgt gccttctcta ctgatggcag tgttttagct gctgggacac atgacggaag2340
tgtgtatttt tgggccactc cacggcaggt ccctagcctg caacatttat gtcgcagtgc2400
aatccgaaga gtgatgccc cccaagaagt tcaggagctg ccgattcctt ccaagctttt2460
ggagtttctc tcgtatcgta tttagaagat tctgccttcc ctagttagtag ggactgacag2520
aatacactta acacaaacct caagctttac tgacttcaat tatctgtttt taaagacgta2580
gaagatttat ttaatttgat atgttcttgt actgcatttt gatcagttga gcttttaaaa2640
tattatttat agacaataga agtatttctg aacatatcaa atataaattt ttttaaagat2700
ctaactgtga aaacatacat acctgtacat atttagatat aagctgctat atgttgaaat2760
gacccttttg cttttctgat ttttagttct gacatgtata tattgcttca gtagagccac2820
aatatgtatc tttgctgtaa agtgcaagga aattttaaat tctgggacac tgagttagat2880
ggtaaatact gacttacgaa agttgaattg ggtgaggcgg gcaaatcacc tgaggtcagc2940
agtttgagac tagcctggca aacatgatga aaccctgtct ctactaaaaa taaaaaagaa3000
aaaaaaaaa aactcgaaac tact
3024

```

<210> 127

<211> 505

<212> DNA

<213> homo sapiens

<400> 127

```

ctgcacgggc gcagatgtag gcaccgggtcc gaggcctgc cctctgtccc cgcggtggg 60
tctcgtctgc tccggttccct gggtcctcaa ttcttggtcc agcttcttcc aggtctgcgc120
gtctgttggt cccagcgctc tgcgaagctg aaaaggagga gcaacctgtc cagaatcccc180
gcaggacagg aaaaggaggg gaaatctcga catggaaaaa ctctacagtg aaaatgaagg240
aatggcttca aaccaaggaa agatggaaaa tgaagaacag ccacaagacg agagaaagcc300
agaagtaact tgtactctgg aagacaagaa gttagaaaac gagggaaaga cagaaaacaa360
gggcaaaaca ggagatgagg aaatgtttaa ggataaagga aagccagaga gtgagggaga420
ggcaaaagaa ggaaagtcag agagggaggg agagtcagag atggaggagg tcgagagaga480
gggaacccga ggtaggggaa gcgga
505

```

<210> 128

<211> 115

<212> PRT

<213> homo sapiens

<400> 128

Pro	Pro	Leu	Leu	Arg	Leu	Phe	Phe	Phe	Tyr	Leu	Arg	Lys	Phe	Ile	Ser
1				5					10					15	
Thr	Ser	Thr	Ala	Glu	Ile	Arg	Lys	Trp	Tyr	Arg	Phe	Gly	Gln	Ile	Ile
			20					25					30		
Leu	Tyr	Glu	Met	Asp	Pro	His	Thr	Thr	Ser	Phe	Leu	Ile	Gln	Ala	Arg
		35					40					45			

Tyr	Asn 50	Ile	Ile	Pro	Gly	Phe 55	Ser	Lys	Ser	Ser	Gln 60	His	Gly	Tyr	Leu
Cys 65	Tyr	Ser	Val	Leu	Ala 70	Phe	Ile	Ala	Ala	Ser 75	Ser	Phe	Arg	Arg	Ala 80
Phe	Phe	Ser	Lys	Phe 85	Lys	Leu	Val	Lys	Val 90	Ser	Cys	Leu	Trp	Ala 95	Ala
Phe	Leu	Pro	Ser 100	Ile	Thr	Met	Lys	Met 105	His	Pro	Thr	Thr	Val 110	Arg	Ala
Ile	Ile	Arg 115													

<210> 129
 <211> 82
 <212> PRT
 <213> homo sapiens

<400> 129

Val 1	Arg	Asp	Gly	Ala 5	Pro	Gly	Leu	Ser	Cys 10	Gly	Phe	Val	Gln	Asn 15	Pro
Phe	Ile	Leu	Phe 20	Lys	Ser	Glu	Leu	Leu 25	Val	Ser	Leu	Arg	Asp 30	Glu	Glu
Thr	Ser	Leu 35	Ser	His	Asn	Leu	Lys 40	Gln	Leu	Pro	Ala	Ala 45	Arg	Arg	Arg
Pro	Leu 50	Arg	Leu	Pro	Met	Ala 55	Thr	Cys	Tyr	Ser	Ala 60	Asp	Gln	Arg	Arg
Thr 65	Ser	Pro	Gly	Thr	Val 70	Ala	Leu	Val	Ser	Ser 75	Met	Ser	Pro	Ser	Val 80

Gly Val

<210> 130
 <400> 130
 000

<210> 131
 <211> 53
 <212> PRT
 <213> homo sapiens

<400> 131

Gly 1	Ile	Ile	Thr	Leu 5	Ser	Leu	Leu	Met	Ile 10	Ile	His	Pro	Gln	Met 15	Glu
Glu	Phe	Ile	Arg 20	Gln	Pro	Leu	Gln	Phe 25	Arg	Leu	Lys	Thr	Gly 30	Ala	His

Arg Thr Gln Gly Thr Ile Lys Glu Asp Gln Glu Pro Arg Phe Phe Leu
35 40 45

Ser Lys Asn Trp Pro
50

<210> 132
<211> 52
<212> PRT
<213> homo sapiens

<400> 132

Leu Phe Ile Leu Arg Trp Arg Ser Leu Ser Val Ser His Phe Ser Phe
1 5 10 15

Val Leu Lys Gln Glu Pro Thr Gly Pro Lys Glu Leu Leu Arg Arg Thr
20 25 30

Arg Asn Leu Gly Phe Phe Phe Gln Lys Ile Gly Pro Ser Pro Ile Asn
35 40 45

Glu Gly Lys Asn
50

<210> 133
<211> 41
<212> PRT
<213> homo sapiens

<400> 133

Lys Lys Lys Pro Arg Phe Leu Val Leu Leu Asn Ser Ser Leu Gly Pro
1 5 10 15

Val Gly Ser Cys Phe Lys Thr Lys Leu Lys Trp Leu Thr Asp Lys Leu
20 25 30

Leu His Leu Arg Met Asn Asn His Gln
35 40

<210> 134
<211> 107
<212> PRT
<213> homo sapiens

<400> 134

Ala Asp Pro Ala Phe Ser Thr Asp Leu Phe Gln Gly Cys Thr Asp Met
1 5 10 15

Ala Ala Ala Phe Arg Lys Ala Ala Lys Ser Arg Gln Arg Glu His Arg
20 25 30

Glu Arg Ser Ser Asp Tyr Arg Lys Lys Gln Glu Tyr Leu Lys Ala Leu
35 40 45

Arg Lys Lys Ala Leu Glu Lys Asn Pro Asp Glu Phe Tyr Tyr Lys Met

50					52					60					
Thr 65	Arg	Val	Lys	Leu	Gln 70	Gly	Gly	Val	His	Ile 75	Ile	Lys	Glu	Thr	Lys 80
Glu	Glu	Val	Thr	Pro 85	Glu	Gln	Leu	Lys	Leu 90	Met	Arg	Thr	Ser	Gly 95	Arg
Gln	Ile	Tyr	Arg 100	Lys	Gly	Arg	Gly	Cys 105	Arg	Ser					
<210> 135															
<211> 63															
<212> PRT															
<213> homo sapiens															
<400> 135															
Arg 1	Ile	Arg	Arg	Ser 5	Pro	Leu	Ile	Phe	Ser 10	Lys	Ala	Val	Gln	Thr 15	Trp
Arg	Arg	Leu	Phe 20	Gly	Arg	Arg	Leu	Ser 25	Pro	Gly	Ser	Gly	Asn 30	Thr	Glu
Ser	Glu	Ala 35	Val	Thr	Thr	Val	Lys 40	Asn	Lys	Asn	Thr	Ser 45	Lys	Leu	Phe
Gly	Arg 50	Arg	Leu	Leu	Lys	Lys 55	Ile	Gln	Met	Asn	Ser 60	Thr	Thr	Lys	
<210> 136															
<211> 87															
<212> PRT															
<213> homo sapiens															
<400> 136															
Leu 1	Phe	Trp	Gly	Tyr 5	Phe	Phe	Leu	Ser	Leu 10	Leu	Asn	Asn	Met	Tyr 15	Ser
Thr	Leu	Glu	Phe 20	Asn	Pro	Ser	His	Phe 25	Val	Val	Glu	Phe	Ile 30	Trp	Ile
Phe	Phe	Lys 35	Ser	Leu	Leu	Pro	Lys 40	Ser	Phe	Glu	Val	Phe 45	Leu	Phe	Phe
Thr	Val 50	Val	Thr	Ala	Ser	Leu 55	Ser	Val	Phe	Pro	Leu 60	Pro	Gly	Leu	Ser
Arg 65	Leu	Pro	Lys	Ser	Arg 70	Arg	His	Val	Cys	Thr 75	Ala	Leu	Glu	Lys	Ile 80
Ser	Gly	Glu	Arg	Arg 85	Ile	Arg									
<210> 137															

<211> 95
 <212> PRT
 <213> homo sapiens

<400> 137

Glu 1	Ala	Asn	Asn	Tyr 5	Met	Ser	Cys	Gln	Gly 10	Gly	Ser	Arg	Phe	His 15	Ser
Phe	Ser	Ile	Leu 20	Pro	Gln	Tyr	Pro	Gly 25	Ile	Asn	Ala	Ala	Thr 30	Gly	Gly
Gln	Ser	Leu 35	Phe	Val	Leu	Leu	Pro 40	Thr	Pro	Ser	Leu	Phe 45	Cys	Leu	Phe
Asn	Ser 50	Val	Lys	Leu	Phe	Cys 55	Leu	Gly	Pro	Gly	Lys 60	Glu	Pro	Lys	Glu
Asn 65	Leu	Ser	Gly	Gln	Val 70	His	Phe	Trp	Asn	Ala 75	Glu	Asn	Ile	Leu	Lys 80
Ala	Arg	Phe	Leu	Glu 85	Tyr	Ser	Gln	Leu	Ala 90	Phe	Phe	Pro	Leu	Ile 95	

<210> 138
 <211> 77
 <212> PRT
 <213> homo sapiens

<400> 138

Asn 1	Ser	Ser	Ala	Ser 5	Ser	Pro	Gln	Phe	Trp 10	Pro	Asn	Ser	Arg	Leu 15	Ala
Val	Phe	Thr	Trp 20	Tyr	Pro	Gly	Val	Gly 25	Leu	Leu	Thr	Leu	Ile 30	Ser	Met
Met	Phe	Ser 35	Lys	Met	Lys	Leu	Asp 40	Lys	Val	Asp	His	Gln 45	Leu	His	Arg
Val	Phe 50	Cys	Lys	Ser	Ile	Val 55	Ser	Lys	Trp	Pro	Arg 60	Asp	Leu	Arg	Lys
Ile 65	Gln	Ile	Phe	Cys	Leu 70	Pro	Trp	Ser	Cys	Phe 75	Lys	Ser			

<210> 139
 <211> 133
 <212> PRT
 <213> homo sapiens

<400> 139

Asp 1	Leu	Lys	Gln	Asp 5	Gln	Gly	Lys	Gln	Lys 10	Ile	Cys	Ile	Phe	Leu 15	Lys
Ser	Leu	Gly	His 20	Leu	Leu	Thr	Ile	Leu 25	Leu	Gln	Lys	Thr	Arg 30	Cys	Ser

Trp	Trp	Ser 35	Thr	Leu	Ser	Ser	Phe 40	Ile	Leu	Glu	Asn	Ile 45	Ile	Glu	Ile
-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----

Lys	Val 50	Ser	Asn	Pro	Thr	Pro 55	Gly	Tyr	Gln	Val	Lys 60	Thr	Ala	Ser	Leu
-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----

Leu 65	Leu	Gly	Gln	Asn	Cys 70	Gly	Leu	Leu	Ala	Glu 75	Leu	Phe	Tyr	Gly	Leu 80
-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------

Gln	Ser	Lys	Trp	Ser 85	Tyr	Leu	Thr	His	His 90	Met	Thr	Lys	Val	Leu 95	Asn
-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Leu	Val	Arg	Gly 100	Lys	Val	Leu	Asn	Ile 105	Gln	Phe	Trp	Ile	Gln 110	Glu	Ile
-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----

Ile	Ile	Val 115	Asn	Phe	Pro	Phe	Lys 120	Ser	Met	Glu	Arg	Met 125	Leu	Val	Glu
-----	-----	------------	-----	-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----	-----

Asn	Ile 130	Leu	Lys	Ile
-----	------------	-----	-----	-----

<210> 140
<400> 140
000

<210> 141
<400> 141
000

<210> 142
<400> 142
000

<210> 143
<211> 783
<212> PRT

<213> homo sapiens

<400> 143

Phe 1	Leu	Leu	Gln	Pro 5	Ser	Ala	Phe	His	Leu 10	Tyr	Glu	Pro	Pro	Leu 15	Asp
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Tyr	Thr	Met	Thr 20	Trp	Arg	Met	Gly	Pro 25	Arg	Phe	Thr	Met	Leu 30	Leu	Ala
-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----

Met	Trp	Leu 35	Val	Cys	Gly	Ser	Glu 40	Pro	His	Pro	His	Ala 45	Thr	Ile	Arg
-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----

Gly	Ser 50	His	Gly	Gly	Arg	Lys 55	Val	Pro	Leu	Val	Ser 60	Pro	Asp	Ser	Ser
-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----

Arg 65	Pro	Ala	Arg	Phe	Leu 70	Arg	His	Thr	Gly	Arg 75	Ser	Arg	Gly	Ile	Glu 80
-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------

Arg	Ser	Thr	Leu	Glu 85	Glu	Pro	Asn	Leu	Gln 90	Pro	Leu	Gln	Arg	Arg 95	Arg
Ser	Val	Pro	Val 100	Leu	Arg	Leu	Ala	Arg 105	Pro	Thr	Glu	Pro	Pro 110	Ala	Arg
Ser	Asp	Ile 115	Asn	Gly	Ala	Ala	Val 120	Arg	Pro	Glu	Gln	Arg 125	Pro	Ala	Ala
Arg	Gly 130	Ser	Pro	Arg	Glu	Met 135	Ile	Arg	Asp	Glu	Gly 140	Ser	Ser	Ala	Arg
Ser 145	Arg	Met	Leu	Arg	Phe 150	Pro	Ser	Gly	Ser	Ser 155	Ser	Pro	Asn	Ile	Leu 160
Ala	Ser	Phe	Ala	Gly 165	Lys	Asn	Arg	Val	Trp 170	Val	Ile	Ser	Ala	Pro 175	His
Ala	Ser	Glu	Gly 180	Tyr	Tyr	Arg	Leu	Met 185	Met	Ser	Leu	Leu	Lys 190	Asp	Asp
Val	Tyr	Cys 195	Glu	Leu	Ala	Glu	Arg 200	His	Ile	Gln	Gln	Ile 205	Val	Leu	Phe
His	Gln 210	Ala	Gly	Glu	Glu	Gly 215	Gly	Lys	Val	Arg	Arg 220	Ile	Thr	Ser	Glu
Gly 225	Gln	Ile	Leu	Glu	Gln 230	Pro	Leu	Asp	Pro	Ser 235	Leu	Ile	Pro	Lys	Leu 240
Met	Ser	Phe	Leu	Lys 245	Leu	Glu	Lys	Gly	Lys 250	Phe	Gly	Met	Val	Leu 255	Leu
Lys	Lys	Thr	Leu 260	Gln	Val	Glu	Glu	Arg 265	Tyr	Pro	Tyr	Pro	Val 270	Arg	Leu
Glu	Ala	Met 275	Tyr	Glu	Val	Ile	Asp 280	Gln	Gly	Pro	Ile	Arg 285	Arg	Ile	Glu
Lys	Ile 290	Arg	Gln	Lys	Gly	Phe 295	Val	Gln	Lys	Cys	Lys 300	Ala	Ser	Gly	Val
Glu 305	Gly	Gln	Val	Val	Ala 310	Glu	Gly	Asn	Asp	Gly 315	Gly	Gly	Gly	Ala	Gly 320
Arg	Pro	Ser	Leu	Gly 325	Ser	Glu	Lys	Lys	Lys 330	Glu	Asp	Pro	Arg	Arg 335	Ala

Gln	Val	Pro	Pro 340	Thr	Arg	Glu	Ser	Arg 345	Val	Lys	Val	Leu	Arg 350	Lys	Leu
Ala	Ala	Thr 355	Ala	Pro	Ala	Leu	Pro 360	Gln	Pro	Pro	Ser	Thr 365	Pro	Arg	Ala
Thr	Thr 370	Leu	Pro	Pro	Ala	Pro 375	Ala	Thr	Thr	Val	Thr 380	Arg	Ser	Thr	Ser
Arg 385	Ala	Val	Thr	Val	Ala 390	Ala	Arg	Pro	Met	Thr 395	Thr	Thr	Ala	Phe	Pro 400
Thr	Thr	Gln	Arg	Pro 405	Trp	Thr	Pro	Ser	Pro 410	Ser	His	Arg	Pro	Pro 415	Thr
Thr	Thr	Glu	Val 420	Ile	Thr	Ala	Arg	Arg 425	Pro	Ser	Val	Ser	Glu 430	Asn	Leu
Tyr	Pro	Pro 435	Ser	Arg	Lys	Asp	Gln 440	His	Arg	Glu	Arg	Pro 445	Gln	Thr	Thr
Arg	Arg 450	Pro	Ser	Lys	Ala	Thr 455	Ser	Leu	Glu	Ser	Phe 460	Thr	Asn	Ala	Pro
Pro 465	Thr	Thr	Ile	Ser	Glu 470	Pro	Ser	Thr	Arg	Ala 475	Ala	Gly	Pro	Gly	Arg 480
Phe	Arg	Asp	Asn	Arg 485	Met	Asp	Arg	Arg	Glu 490	His	Gly	His	Arg	Asp 495	Pro
Asn	Val	Val	Pro 500	Gly	Pro	Pro	Lys	Pro 505	Ala	Lys	Glu	Lys	Pro 510	Pro	Lys
Lys	Lys	Ala 515	Gln	Asp	Lys	Ile	Leu 520	Ser	Asn	Glu	Tyr	Glu 525	Glu	Lys	Tyr
Asp	Leu 530	Ser	Arg	Pro	Thr	Ala 535	Ser	Gln	Leu	Glu	Asp 540	Glu	Leu	Gln	Val
Gly 545	Asn	Val	Pro	Leu	Lys 550	Lys	Ala	Lys	Glu	Ser 555	Lys	Lys	His	Glu	Lys 560
Leu	Glu	Lys	Pro	Glu 565	Lys	Glu	Lys	Lys	Lys 570	Lys	Met	Lys	Asn	Glu 575	Asn
Ala	Asp	Lys	Leu 580	Leu	Lys	Ser	Glu	Lys 585	Gln	Met	Lys	Lys	Ser 590	Glu	Lys

Lys	Ser	Lys 595	Gln	Glu	Lys	Glu	Lys 600	Ser	Lys	Lys	Lys	Lys 605	Gly	Gly	Lys	
Thr	Glu 610	Gln	Asp	Gly	Tyr	Gln 615	Lys	Pro	Thr	Asn	Lys 620	His	Phe	Thr	Gln	
Ser 625	Pro	Lys	Lys	Ser	Val 630	Ala	Asp	Leu	Leu	Gly 635	Ser	Phe	Glu	Gly	Lys 640	
Arg	Arg	Leu	Leu	Leu 645	Ile	Thr	Ala	Pro	Lys 650	Ala	Glu	Asn	Asn	Met 655	Tyr	
Val	Gln	Gln	Arg 660	Asp	Glu	Tyr	Leu	Glu 665	Ser	Phe	Cys	Lys	Met 670	Ala	Thr	
Arg	Lys	Ile 675	Ser	Val	Ile	Thr	Ile 680	Phe	Gly	Pro	Val	Asn 685	Asn	Ser	Thr	
Met	Lys 690	Ile	Asp	His	Phe	Gln 695	Leu	Asp	Asn	Glu	Lys 700	Pro	Met	Arg	Val	
Val 705	Asp	Asp	Glu	Asp	Leu 710	Val	Asp	Gln	Arg	Leu 715	Ile	Ser	Glu	Leu	Arg 720	
Lys	Glu	Tyr	Gly	Met 725	Thr	Tyr	Asn	Asp	Phe 730	Phe	Met	Val	Leu	Thr 735	Asp	
Val	Asp	Leu	Arg 740	Val	Lys	Gln	Tyr	Tyr 745	Glu	Val	Pro	Ile	Thr 750	Met	Lys	
Ser	Val	Phe 755	Asp	Leu	Ile	Asp	Thr 760	Phe	Gln	Ser	Arg	Ile 765	Lys	Asp	Met	
Glu	Asn 770	Gln	Lys	Arg	Gly	Val 775	Phe	Phe	Glu	Gly	Gly 780	Lys	Thr	Pro		

<210> 144
 <211> 87
 <212> PRT
 <213> homo sapiens

<400> 144

Lys 1	Met	Val	Val	Gly 5	Val	Trp	Val	Phe	Leu 10	Arg	Trp	Glu	Arg	Met 15	Cys	
Glu	Asn	Leu	Phe 20	Gln	Gly	Asn	Gly	Phe 25	Ala	Ala	Glu	Val	Arg 30	Met	Cys	
Ser	Cys	Ile 35	Asp	Leu	Gln	Thr	Pro 40	Arg	Arg	Trp	Val	His 45	Thr	Ala	Cys	

Leu	Gly	Val	Pro	Arg	Asp	Ser	58 Arg	Pro	Pro	Thr	Tyr	Leu	Ser	Glu	Ala
	50					55					60				
Arg	Ala	Ala	Gly	His	Gly	Pro	Ser	Ala	Lys	Pro	Val	Cys	Asp	Ala	Leu
65					70					75					80
Gly	Ala	Leu	Val	Gln	Glu	Ala									
				85											

<210> 145
 <211> 97
 <212> PRT
 <213> homo sapiens

<400> 145

Ser	Phe	Ser	Ser	Leu	Gly	Val	Arg	Asn	Thr	Leu	Phe	Ile	Thr	Phe	Lys
1				5					10					15	
Phe	Ala	Leu	Tyr	Phe	Phe	Ser	Ser	Met	Leu	Val	Leu	Trp	Thr	Phe	Gly
			20					25					30		
Asp	Val	Ser	Val	Arg	Ala	Gly	Glu	Arg	Gly	Val	Arg	Arg	Pro	Ser	His
		35					40					45			
Arg	Trp	Ser	Trp	Pro	Pro	Pro	Ala	Leu	Ser	Ser	Leu	Pro	Asp	His	Arg
	50					55					60				
Phe	Pro	Ile	Cys	Pro	Ser	Glu	Asn	Leu	Ser	Gln	Gly	Glu	Leu	Lys	Phe
65					70					75					80
Thr	Gly	Gln	Gly	Thr	Ser	Phe	Ile	Tyr	Phe	Ile	Met	Leu	Ala	Asn	Arg
				85					90					95	

Thr

<210> 146
 <211> 87
 <212> PRT
 <213> homo sapiens

<400> 146

Ala	Ser	Cys	Thr	Lys	Ala	Pro	Arg	Ala	Ser	His	Thr	Gly	Leu	Ala	Glu
1				5					10					15	
Gly	Pro	Trp	Pro	Ala	Ala	Arg	Ala	Ser	Asp	Lys	Tyr	Val	Gly	Gly	Leu
			20					25					30		
Glu	Ser	Leu	Gly	Thr	Pro	Lys	His	Ala	Val	Cys	Thr	His	Leu	Leu	Gly
		35					40					45			
Val	Cys	Arg	Ser	Ile	Gln	Glu	His	Ile	Leu	Thr	Ser	Ala	Ala	Asn	Pro
	50					55					60				

59

Phe	Pro	Trp	Lys	Arg	Phe	Ser	His	Ile	Leu	Ser	His	Leu	Lys	Lys	Thr
65					70					75					80

His	Thr	Pro	Thr	Thr	Ile	Phe
				85		

<210> 147
 <211> 119
 <212> PRT
 <213> homo sapiens
 <400> 147

Asn	Ser	Lys	Asp	Lys	Cys	Phe	Ser	Leu	Ala	Phe	Ile	Thr	Thr	Pro	Glu
1				5					10					15	
Thr	Glu	Arg	Trp	Arg	Cys	Cys	Ala	Ser	Glu	Pro	Arg	Leu	Leu	Ala	Leu
			20					25					30		
Lys	His	Gln	Gly	His	Arg	Thr	Gln	Ala	Trp	Gln	Arg	Gly	His	Gly	Gln
		35					40					45			
Arg	His	Glu	Leu	Gln	Thr	Ser	Met	Leu	Glu	Val	Ser	Asn	Pro	Leu	Ala
	50					55					60				
Pro	Pro	Ser	Met	Gln	Cys	Ala	Pro	Thr	Phe	Trp	Val	Ser	Ala	Asp	Arg
65					70					75					80
Tyr	Arg	Asn	Thr	Ser	Leu	Pro	Leu	Gln	Arg	Thr	His	Phe	Pro	Gly	Lys
				85					90					95	
Asp	Phe	His	Thr	Ser	Ser	Pro	Thr	Ser	Lys	Lys	Pro	Thr	His	Pro	Gln
			100					105					110		
Pro	Phe	Phe	Lys	Ala	Pro	Arg									
		115													

<210> 148
 <211> 87
 <212> PRT
 <213> homo sapiens
 <400> 148

Ser	Thr	Lys	Gly	Ile	Ala	His	Arg	Leu	Gly	Arg	Gly	Ala	Met	Ala	Ser
1				5					10					15	
Gly	Thr	Ser	Phe	Arg	Gln	Val	Cys	Trp	Arg	Ser	Arg	Ile	Pro	Trp	His
			20					25					30		
Pro	Gln	Ala	Cys	Ser	Val	His	Pro	Pro	Ser	Gly	Cys	Leu	Gln	Ile	Asp
		35					40					45			
Thr	Gly	Thr	His	Pro	Tyr	Leu	Cys	Ser	Glu	Pro	Ile	Ser	Leu	Glu	Lys
	50					55					60				

Ile	Phe	Thr	His	Pro	Leu	Pro	Pro	Gln	Lys	Asn	Pro	His	Thr	His	Asn
65					70					75					80

His	Phe	Leu	Lys	Pro	His	Gly
				85		

<210> 149
 <211> 69
 <212> PRT
 <213> homo sapiens

<400> 149

Asp	Pro	Pro	Ser	His	Ser	Gln	Leu	Gly	Arg	Cys	Cys	His	Arg	Met	Val
1				5					10					15	
Phe	Glu	Ser	Val	Gly	Ala	Arg	Ala	His	Phe	Trp	Leu	Ser	Gln	Gln	Leu
			20					25					30		
Gly	Trp	His	Leu	Leu	Pro	Ser	Ala	Arg	Asn	Ser	Asn	Ile	Met	Asn	Ala
		35					40					45			
Arg	Asp	Ser	Val	Leu	Ser	Lys	Val	Phe	His	Pro	Lys	Gly	Ala	Gly	His
	50					55					60				

Gly	Cys	Ser	Arg	Leu
65				

<210> 150
 <211> 68
 <212> PRT
 <213> homo sapiens

<400> 150

Ser	Ala	His	Leu	Gly	Leu	Pro	Lys	Cys	Trp	Asp	Tyr	Arg	Arg	Glu	His
1				5					10					15	
Pro	Cys	Pro	Ala	Pro	Phe	Gly	Trp	Lys	Thr	Leu	Leu	Ser	Thr	Leu	Ser
			20					25					30		
Leu	Ala	Phe	Ile	Met	Leu	Leu	Phe	Leu	Ala	Leu	Gly	Ser	Lys	Cys	His
		35					40					45			
Pro	Ser	Cys	Cys	Asp	Asn	Gln	Lys	Cys	Ala	Leu	Ala	Pro	Thr	Leu	Ser
	50					55					60				

Asn	Thr	Ile	Arg
65			

<210> 151
 <211> 57
 <212> PRT
 <213> homo sapiens

<400> 151

His	His	Thr	Gln	Pro	Ile	Phe	Val ⁶¹	Phe	Leu	Val	Ala	Thr	Gly	Phe	His
1				5					10					15	
His	Val	Gly	Gln	Ala	Gly	Leu	Glu	Pro	Leu	Thr	Ser	Gly	Asp	Pro	Pro
			20					25					30		
Thr	Leu	Ala	Ser	Gln	Ser	Ala	Gly	Ile	Thr	Gly	Val	Ser	Thr	Arg	Ala
		35					40					45			
Leu	Pro	Leu	Leu	Asp	Gly	Arg	Leu	Tyr							
	50					55									

<210> 152
 <211> 57
 <212> PRT
 <213> homo sapiens
 <400> 152

Ser	Ala	Gly	Ile	Pro	Lys	Leu	Ala	Pro	Lys	Ile	Pro	Leu	Pro	Phe	Ser
1				5					10					15	
Asp	Leu	Leu	Lys	Cys	Tyr	Leu	Ile	Ser	Gly	Ala	Phe	Pro	Asp	His	Thr
			20					25					30		
Leu	Lys	Thr	Ser	Thr	Pro	Thr	His	Gly	Pro	Cys	Pro	Pro	Ser	Arg	Leu
		35					40					45			
His	Phe	Leu	Ala	Tyr	Thr	Tyr	Gln	Met							
	50					55									

<210> 153
 <211> 32
 <212> PRT
 <213> homo sapiens
 <400> 153

Leu	Lys	Thr	Leu	Leu	Thr	Val	Ala	Ser	Ile	Arg	Val	Ser	Thr	Phe	Tyr
1				5					10					15	
Ser	Ser	Asp	Pro	Thr	Ser	Phe	Asn	Leu	Leu	Leu	Leu	Ile	Tyr	Gly	Gly
			20					25					30		

<210> 154
 <211> 32
 <212> PRT
 <213> homo sapiens
 <400> 154

Thr	Lys	Arg	Ala	Val	Met	Lys	Ser	Met	His	Leu	Cys	Ala	Ile	Arg	Ala
1				5					10					15	
Phe	Leu	Val	Pro	His	Ser	Glu	Leu	Ile	Asp	Ser	Asp	Tyr	Ile	His	Phe
			20					25					30		

<210> 155
 <211> 31

<212> PRT

<213> homo sapiens

<400> 155

Gly	Arg	Val	Arg	Ala	Val	Lys	Gly	Arg	His	Ser	Asp	Arg	Ser	His	Ser
1				5					10					15	
Gln	Gln	Cys	Phe	Gln	Ser	Val	Asn	Thr	Asp	Glu	Val	Pro	Thr	Thr	
			20					25					30		

<210> 156

<211> 52

<212> PRT

<213> homo sapiens

<400> 156

Val	Gln	Asn	Val	Met	Ser	Ala	Cys	Asn	Phe	Ile	Phe	Ile	Lys	Ala	Lys
1				5					10					15	
Leu	Ile	Tyr	Met	Glu	Tyr	Cys	Ser	Ile	Tyr	Tyr	Ala	Pro	Ile	Tyr	Ile
			20					25					30		
Leu	Ser	Pro	Val	Val	Arg	Tyr	Phe	Ile	Ser	Leu	Leu	Leu	Asn	Ile	Phe
		35					40					45			
Tyr	Thr	Tyr	Leu												
	50														

<210> 157

<211> 59

<212> PRT

<213> homo sapiens

<400> 157

Thr	Gly	Thr	Phe	Cys	Phe	Phe	Ile	Cys	Cys	Ile	Glu	Asn	Ser	His	Thr
1				5					10					15	
Gln	Phe	Ser	Ile	Leu	Cys	Gln	Cys	Ser	His	His	Gly	Trp	Thr	Leu	Gly
			20					25					30		
Arg	Asn	Ser	Pro	Gln	Pro	Phe	Leu	Val	Ser	Phe	Ser	Gln	Phe	Phe	Ser
		35					40					45			
Val	Ser	Arg	Trp	Ala	Pro	Val	Ile	Asn	Leu	Pro					
	50					55									

<210> 158

<211> 38

<212> PRT

<213> homo sapiens

<400> 158

Leu	Ser	Leu	Cys	Pro	Cys	Trp	Pro	Gly	Asn	Phe	Phe	Gln	Trp	Cys	Leu
1				5					10					15	
Leu	Glu	Glu	Val	Phe	Ser	Ser	Gly	Gln	Phe	Lys	Glu	Ile	Lys	Leu	Gly
			20					25					30		

Asn Gly Glu Gly Gly Arg
35

<210> 159
<211> 33
<212> PRT
<213> homo sapiens

<400> 159

Gly	Ser	Ile	Leu	Asp	Met	Met	Gln	Glu	Ile	Ser	Ser	Trp	Ser	Gln	Lys
1				5					10					15	
Phe	Pro	Arg	Gly	Ala	Val	Phe	Leu	Arg	Asn	Gly	Val	Tyr	Leu	Asn	Asn
			20					25					30		

Ser

<210> 160
<211> 44
<212> PRT
<213> homo sapiens

<400> 160

Lys	Lys	Leu	Pro	Gly	Gln	His	Gly	His	Lys	Leu	Asn	Tyr	Tyr	Leu	Asn
1				5					10					15	
Lys	Leu	His	Phe	Leu	Lys	Ile	Gln	His	Leu	Leu	Gly	Thr	Phe	Asp	Ser
			20					25					30		
Arg	Lys	Arg	Phe	Pro	Ala	Ser	Tyr	Pro	Lys	Cys	Phe				
		35					40								

<210> 161
<211> 225
<212> PRT
<213> homo sapiens

<400> 161

Ala	Ala	Gly	Gly	Leu	Gly	Leu	Gly	Val	Gly	Pro	Arg	Gly	Met	Trp	Arg
1				5					10					15	
Ala	Gly	Ser	Met	Ser	Ala	Glu	Leu	Gly	Val	Gly	Cys	Ala	Leu	Arg	Ala
			20					25					30		
Val	Asn	Glu	Arg	Val	Gln	Gln	Ala	Val	Ala	Arg	Arg	Pro	Arg	Asp	Leu
		35					40					45			
Pro	Ala	Ile	Gln	Pro	Arg	Leu	Val	Ala	Val	Ser	Lys	Thr	Lys	Pro	Ala
	50					55					60				
Asp	Met	Val	Ile	Glu	Ala	Tyr	Gly	His	Gly	Gln	Arg	Thr	Phe	Gly	Glu
65					70					75					80
Asn	Tyr	Val	Gln	Glu	Leu	Leu	Glu	Lys	Ala	Ser	Asn	Pro	Lys	Ile	Leu

85

90

95

Ser	Leu	Cys	Pro 100	Glu	Ile	Lys	Trp	His 105	Phe	Ile	Gly	His	Leu 110	Gln	Lys
Gln	Asn	Val 115	Asn	Lys	Leu	Met	Ala 120	Val	Pro	Asn	Leu	Phe 125	Met	Leu	Glu
Thr	Val 130	Asp	Ser	Val	Lys	Leu 135	Ala	Asp	Lys	Val	Asn 140	Ser	Ser	Trp	Gln
Arg 145	Lys	Gly	Ser	Pro	Glu 150	Arg	Leu	Lys	Val	Met 155	Val	Gln	Ile	Asn	Thr 160
Ser	Gly	Glu	Glu	Ser 165	Lys	His	Gly	Leu	Pro 170	Pro	Ser	Glu	Thr	Ile 175	Ala
Ile	Val	Glu	His 180	Ile	Asn	Ala	Lys	Cys 185	Pro	Asn	Leu	Glu	Phe 190	Val	Gly
Leu	Met	Thr 195	Ile	Gly	Ser	Phe	Gly 200	His	Asp	Leu	Ser	Gln 205	Gly	Pro	Asn
Pro	Asp 210	Phe	Gln	Leu	Leu	Leu 215	Ser	Leu	Pro	Glu	Glu 220	Thr	Val	Val	Lys

Ser
225

<210> 162
 <211> 99
 <212> PRT
 <213> homo sapiens

<400> 162

Cys 1	Arg	Gly	Pro	Gly 5	Ala	Arg	Arg	Arg	Ser 10	Pro	Gly	Asp	Val	Glu 15	Ser
Trp	Gln	His	Val 20	Gly	Arg	Ala	Gly	Ser 25	Arg	Val	Arg	Ile	Ala 30	Gly	Gly
Glu	Arg	Ala 35	Arg	Ala	Ala	Gly	Cys 40	Gly	Ala	Ala	Ala	Ala 45	Gly	Ser	Pro
Ser	His 50	Pro	Ala	Pro	Ala	Ser 55	Gly	Gly	Gln	Gln	Asn 60	Gln	Thr	Cys	Arg
His 65	Gly	Asp	Arg	Gly	Leu 70	Trp	Thr	Trp	Ala	Ala 75	His	Phe	Trp	Arg	Glu 80
Leu	Arg	Ser	Gly	Thr	Ala	Arg	Lys	Ser	Ile	Lys	Ser	Gln	Asn	Ser	Val

85

65

90

95

Phe Val Ser

<210> 163

<211> 120

<212> PRT

<213> homo sapiens

<400> 163

Leu 1	Arg	Ser	Cys	Pro 5	Lys	Leu	Pro	Met	Val 10	Ile	Ser	Pro	Thr	Asn 15	Ser
Arg	Leu	Gly	His 20	Leu	Ala	Phe	Met	Cys 25	Ser	Thr	Met	Ala	Met 30	Val	Ser
Glu	Gly	Gly 35	Arg	Pro	Cys	Leu	Leu 40	Ser	Ser	Pro	Leu	Val 45	Leu	Ile	Trp
Thr	Ile 50	Thr	Phe	Asn	Leu	Ser 55	Gly	Glu	Pro	Phe	Leu 60	Cys	Gln	Glu	Leu
Phe 65	Thr	Leu	Ser	Ala	Asn 70	Phe	Thr	Glu	Ser	Thr 75	Val	Ser	Ser	Met	Lys 80
Arg	Leu	Gly	Thr	Ala 85	Ile	Asn	Leu	Leu	Thr 90	Phe	Cys	Phe	Cys	Arg 95	Trp
Pro	Met	Lys	Cys 100	His	Leu	Ile	Ser	Gly 105	His	Lys	Asp	Arg	Ile 110	Leu	Gly
Phe	Asp	Ala 115	Phe	Ser	Ser	Ser	Ser	Ser	Ser						

<210> 164

<211> 75

<212> PRT

<213> homo sapiens

<400> 164

Thr 1	Ser	Thr	Gly	Pro 5	Ser	Ser	Pro	Leu	Val 10	Ala	Ser	Ala	Ala	Thr 15	Glu
Leu	Ala	Ala	Phe 20	Ala	Ala	Ala	Phe	Ser 25	Ser	Ala	Cys	Met	Arg 30	Pro	Glu
Gly	Ser	Ala 35	Ser	Leu	Phe	Trp	Asn 40	Arg	Leu	Pro	Leu	Leu 45	Met	Phe	Gly
Asp	Leu 50	Gln	Gly	Cys	Glu	Ala 55	Arg	Glu	Gly	Ile	Ala 60	Met	Arg	Ile	Leu
Gln	Ala	Ser	Phe	Ser	Gly	Leu	Ser	Ser	Lys	Gly					

Thr Ala Phe Pro Leu Pro Val Val Val Ala Ala Val Leu Trp Gly Ala
1 5 10 15

Ala	Pro	Thr	Arg 20	Gly	Leu	Ile	Arg	Ala 25	Thr	Ser	Asp	His	Asn 30	Ala	Ser
Met	Asp	Phe 35	Ala	Asp	Leu	Pro	Ala 40	Leu	Phe	Gly	Ala	Thr 45	Leu	Ser	Gln
Glu	Gly 50	Leu	Gln	Gly	Phe	Leu 55	Val	Glu	Ala	His	Pro 60	Asp	Asn	Ala	Cys
Ser 65	Pro	Ile	Ala	Pro	Pro 70	Pro	Pro	Ala	Pro	Val 75	Asn	Gly	Ser	Val	Phe 80
Ile	Ala	Leu	Leu	Arg 85	Arg	Phe	Asp	Cys	Asn 90	Phe	Asp	Leu	Lys	Val 95	Leu
Asn	Ala	Gln	Lys 100	Ala	Gly	Tyr	Gly	Ala 105	Ala	Val	Val	His	Asn 110	Val	Asn
Ser	Asn	Glu 115	Leu	Leu	Asn	Met	Val 120	Trp	Asn	Ser	Glu	Glu 125	Ile	Gln	Gln
Gln	Ile 130	Trp	Ile	Pro	Ser	Val 135	Phe	Ile	Gly	Glu	Arg 140	Ser	Ser	Glu	Tyr
Leu 145	Arg	Ala	Leu	Phe	Val 150	Tyr	Glu	Lys	Gly	Ala 155	Arg	Val	Leu	Leu	Val 160
Pro	Asp	Asn	Thr	Phe 165	Pro	Leu	Gly	Tyr	Tyr 170	Leu	Ile	Pro	Phe	Thr 175	Gly
Ile	Val	Gly	Leu 180	Leu	Val	Leu	Ala	Met 185	Gly	Ala	Val	Met	Ile 190	Ala	Arg
Cys	Ile	Gln 195	His	Arg	Lys	Arg	Leu 200	Gln	Arg	Asn	Arg	Leu 205	Thr	Lys	Glu
Gln	Leu 210	Lys	Gln	Ile	Pro	Thr 215	His	Asp	Tyr	Gln	Lys 220	Gly	Asp	Gln	Tyr
Asp 225	Val	Cys	Ala	Ile	Cys 230	Leu	Asp	Glu	Tyr	Glu 235	Asp	Gly	Asp	Lys	Leu 240
Arg	Val	Leu	Pro	Cys 245	Ala	His	Ala	Tyr	His 250	Ser	Arg	Cys	Val	Asp 255	Pro
Trp	Leu	Thr	Gln 260	Thr	Arg	Lys	Thr	Cys 265	Pro	Ile	Cys	Lys	Gln 270	Pro	Val

His	Arg	Gly 275	Pro	Gly	Asp	Glu	Asp 280	Gln	Glu	Glu	Glu	Thr 285	Gln	Gly	Gln	
							68									
Glu	Glu 290	Gly	Asp	Glu	Gly	Glu 295	Pro	Arg	Asp	His	Pro 300	Ala	Ser	Glu	Arg	
Thr 305	Pro	Leu	Leu	Gly	Ser 310	Ser	Pro	Thr	Leu	Pro 315	Thr	Ser	Phe	Gly	Ser 320	
Leu	Ala	Pro	Ala	Pro 325	Leu	Val	Phe	Pro	Gly 330	Pro	Ser	Thr	Asp	Pro 335	Pro	
Leu	Ser	Pro	Pro 340	Ser	Ser	Pro	Val	Ile 345	Leu	Val						

<210> 168
 <211> 588
 <212> PRT
 <213> homo sapiens

<400> 168

Gln 1	Val	Thr	Asn	Met 5	Ser	Asp	Lys	Ser	Glu 10	Leu	Lys	Ala	Glu	Leu 15	Glu	
Arg	Lys	Lys	Gln 20	Arg	Leu	Ala	Gln	Ile 25	Arg	Glu	Glu	Lys	Lys 30	Arg	Lys	
Glu	Glu	Glu 35	Arg	Lys	Lys	Lys	Glu 40	Thr	Asp	Gln	Lys	Lys 45	Glu	Ala	Val	
Ala	Pro 50	Val	Gln	Glu	Glu	Ser 55	Asp	Leu	Glu	Lys	Lys 60	Arg	Arg	Glu	Ala	
Glu 65	Ala	Leu	Leu	Gln	Ser 70	Met	Gly	Leu	Thr	Pro 75	Glu	Ser	Pro	Ile	Val 80	
Pro	Pro	Pro	Met	Ser 85	Pro	Ser	Ser	Lys	Ser 90	Val	Ser	Thr	Pro	Ser 95	Glu	
Ala	Gly	Ser	Gln 100	Asp	Ser	Gly	Asp	Gly 105	Ala	Val	Gly	Ser	Arg 110	Arg	Gly	
Pro	Ile	Lys 115	Leu	Gly	Met	Ala	Lys 120	Ile	Thr	Gln	Val	Asp 125	Phe	Pro	Pro	
Arg	Glu 130	Ile	Val	Thr	Tyr	Thr 135	Lys	Glu	Thr	Gln	Thr 140	Pro	Val	Met	Ala	
Gln 145	Pro	Lys	Glu	Asp	Glu 150	Glu	Glu	Asp	Asp	Asp 155	Val	Val	Ala	Pro	Lys 160	

Pro	Pro	Ile	Glu	Pro 165	Glu	Glu	Glu	Lys	Thr 170	Leu	Lys	Lys	Asp	Glu 175	Glu
Asn	Asp	Ser	Lys 180	Ala	Pro	Pro	His	Glu 185	Leu	Thr	Glu	Glu	Glu 190	Lys	Gln
Gln	Ile	Leu 195	His	Ser	Glu	Glu	Phe 200	Leu	Ser	Phe	Phe	Asp 205	His	Ser	Thr
Arg	Ile 210	Val	Glu	Arg	Ala	Leu 215	Ser	Glu	Gln	Ile	Asn 220	Ile	Phe	Phe	Asp
Tyr 225	Ser	Gly	Arg	Asp	Leu 230	Glu	Asp	Lys	Glu	Gly 235	Glu	Ile	Gln	Ala	Gly 240
Ala	Lys	Leu	Ser	Leu 245	Asn	Arg	Gln	Phe	Phe 250	Asp	Glu	Arg	Trp	Ser 255	Lys
His	Arg	Val	Val 260	Ser	Cys	Leu	Asp	Trp 265	Ser	Ser	Gln	Tyr	Pro 270	Glu	Leu
Leu	Val	Ala 275	Ser	Tyr	Asn	Asn	Asn 280	Glu	Asp	Ala	Pro	His 285	Glu	Pro	Asp
Gly	Val 290	Ala	Leu	Val	Trp	Asn 295	Met	Lys	Tyr	Lys	Lys 300	Thr	Thr	Pro	Glu
Tyr 305	Val	Phe	His	Cys	Gln 310	Ser	Ala	Val	Met	Ser 315	Ala	Thr	Phe	Ala	Lys 320
Phe	His	Pro	Asn	Leu 325	Val	Val	Gly	Gly	Thr 330	Tyr	Ser	Gly	Gln	Ile 335	Val
Leu	Trp	Asp	Asn 340	Arg	Ser	Asn	Lys	Arg 345	Thr	Pro	Val	Gln	Arg 350	Thr	Pro
Leu	Ser	Ala 355	Ala	Ala	His	Thr	His 360	Pro	Val	Tyr	Cys	Val 365	Asn	Val	Val
Gly	Thr 370	Gln	Asn	Ala	His	Asn 375	Leu	Ile	Ser	Ile	Ser 380	Thr	Asp	Gly	Lys
Ile 385	Cys	Ser	Trp	Ser	Leu 390	Asp	Met	Leu	Ser	His 395	Pro	Gln	Asp	Ser	Met 400
Glu	Leu	Val	His	Lys 405	Gln	Ser	Lys	Ala	Val 410	Ala	Val	Thr	Ser	Met 415	Ser
Phe	Pro	Val	Gly	Asp	Val	Asn	Asn	Phe	Val	Val	Gly	Ser	Glu	Glu	Gly

420							70	425			430					
Ser	Val	Tyr 435	Thr	Ala	Cys	Arg	His 440	Gly	Ser	Lys	Ala	Gly 445	Ile	Ser	Glu	
Met	Phe 450	Glu	Gly	His	Gln	Gly 455	Pro	Ile	Thr	Gly	Ile 460	His	Cys	His	Ala	
Ala 465	Val	Gly	Ala	Val	Asp 470	Phe	Ser	His	Leu	Phe 475	Val	Thr	Ser	Ser	Phe 480	
Asp	Trp	Thr	Val	Lys 485	Leu	Trp	Thr	Thr	Lys 490	Asn	Asn	Lys	Pro	Leu 495	Tyr	
Ser	Phe	Glu	Asp 500	Asn	Ala	Asp	Tyr	Val 505	Tyr	Asp	Val	Met	Trp 510	Ser	Pro	
Thr	His	Pro 515	Ala	Leu	Phe	Ala	Cys 520	Val	Asp	Gly	Met	Gly 525	Arg	Leu	Asp	
Leu	Trp 530	Asn	Leu	Asn	Asn	Asp 535	Thr	Glu	Val	Pro	Thr 540	Ala	Ser	Ile	Ser	
Val 545	Glu	Gly	Asn	Pro	Ala 550	Leu	Asn	Arg	Val	Arg 555	Trp	Thr	His	Ser	Gly 560	
Arg	Gly	Gly	Gly	Cys 565	Gly	Gly	Ile	Leu	Lys 570	Asp	Lys	Phe	Cys	Tyr 575	Phe	
Ala	Met	Leu	Gly 580	Gly	Ala	Val	Cys	Trp 585	Ser	Pro	Gln					

<210> 169
 <211> 41
 <212> PRT
 <213> homo sapiens

<400> 169

Phe 1	His	Val	Glu	Gln 5	Leu	Ser	His	Ser	Phe 10	Leu	Ser	Trp	Arg	Lys 15	Asp
Thr	Ile	Gln	Arg 20	Gly	Ser	Lys	Asp	Phe 25	Val	Lys	Arg	Gly	Ile 30	His	Asn
Leu	Leu	Trp 35	Ser	Lys	Cys	Pro	His 40	Leu							

<210> 170
 <211> 55
 <212> PRT
 <213> homo sapiens

<400> 170

Cys 1	Pro	Arg	Asp	Val 5	Gly	Thr	Cys	Ser	Ile 10	Val	Asn	Tyr	Gly	Cys 15	His
Val	Leu	Gln	Asn 20	Pro	Tyr	Cys	Pro	Phe 25	Glu	Leu	Cys	Pro	Ser 30	Ser	Lys
Ile	Arg	Ser 35	Tyr	Asp	Ser	Ile	Val 40	Gln	His	Gly	Ile	Ile 45	Met	Lys	Ser
Leu	Ser 50	Ser	Ser	Ile	Phe	Pro 55									

<210> 171
 <211> 50
 <212> PRT
 <213> homo sapiens

<400> 171

Lys 1	Ala	Phe	Leu	Val 5	Leu	Ser	Phe	Pro	Lys 10	Trp	Ala	Leu	Phe	Leu 15	Val
Ile	His	Met	Thr 20	Leu	Phe	Gly	Cys	Gly 25	Cys	Leu	Leu	Asn	Phe 30	Leu	Phe
Trp	Thr	Ser 35	Phe	Ser	Lys	Pro	Lys 40	Pro	Ala	Arg	Asp	Arg 45	Lys	Gly	Asn
Gly	Asn 50														

<210> 172
 <211> 60
 <212> PRT
 <213> homo sapiens

<400> 172

Cys 1	Thr	Phe	Asn	Ile 5	Glu	Ser	Phe	Ile	Tyr 10	Leu	Ile	Val	Tyr	Arg 15	Thr
Phe	His	Asn	Tyr 20	Thr	His	Leu	Leu	His 25	Asn	Ile	Leu	Thr	Ser 30	Ile	Phe
Lys	Phe	Phe 35	Cys	Thr	Ser	Ser	Phe 40	Ser	Phe	Asn	Leu	Val 45	Lys	Pro	Val
Ile	His 50	Thr	Asn	Val	Tyr	Cys 55	Glu	Leu	Ser	Glu	Gly 60				

<210> 173
 <211> 67
 <212> PRT
 <213> homo sapiens

<400> 173

Glu	Glu	Ser	Phe	Val	Phe	Leu	Ile	His	Ser	Phe	Val	Asn	Arg	Tyr	Lys
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

1				5			72		10					15		
Gly	Thr	Asn	Val 20	Leu	Thr	Tyr	Thr	Lys 25	Lys	Lys	Lys	Lys	Ile	Leu 30	Val	Tyr
Pro	Leu	Met 35	Leu	Ile	His	Arg	Val 40	Leu	Ser	Tyr	Asn	Val 45	Ile	Gln	Leu	
Gly	Ser 50	Leu	Thr	Phe	Phe	Pro 55	Lys	Asn	Ile	Phe	Ile 60	Glu	Lys	Gly	Ile	
Thr 65	Leu	Ser														

<210> 174
 <211> 56
 <212> PRT
 <213> homo sapiens

<400> 174

Leu 1	Tyr	His	Ile	Ile 5	Arg	Lys	His	Ser	Val 10	Asp	Gln	His	Lys	Trp 15	Val	
His	Lys	Asn	Phe 20	Phe	Phe	Leu	Gly	Val 25	Cys	Lys	His	Ile	Cys 30	Ser	Phe	
Ile	Ser	Val 35	Tyr	Lys	Thr	Val	Asn 40	Gln	Lys	Asp	Lys	Thr 45	Phe	Phe	Leu	
Val	Phe 50	Val	Ile	Phe	Phe	Leu 55	Asn									

<210> 175
 <400> 175
 000

<210> 176
 <400> 176
 000

<210> 177
 <400> 177
 000

<210> 178
 <400> 178
 000

<210> 179
 <400> 179
 000

<210> 180
 <400> 180
 000

<210> 181
 <211> 289
 <212> PRT

<213> homo sapiens

<400> 181

Ser 1	Arg	Arg	Thr	Gln 5	Gly	Ala	Ala	Ser	Thr 10	Arg	Phe	Pro	Gln	Pro 15	Asp	
Thr	Ile	Gly	Gln 20	Asp	Phe	Ser	Ala	Ser 25	Ala	Gln	Arg	Gly	Gly 30	Leu	Val	
Ala	His	Ser 35	Asp	Leu	Asp	Glu	Arg 40	Ala	Ile	Glu	Ala	Leu 45	Lys	Glu	Phe	
Asn	Glu 50	Asp	Gly	Ala	Leu	Ala 55	Val	Leu	Gln	Gln	Phe 60	Lys	Asp	Ser	Asp	
Leu 65	Ser	His	Val	Gln	Asn 70	Lys	Ser	Ala	Phe	Leu 75	Cys	Gly	Val	Met	Lys 80	
Thr	Tyr	Arg	Gln	Arg 85	Glu	Lys	Gln	Gly	Thr 90	Lys	Val	Ala	Asp	Ser 95	Ser	
Lys	Gly	Pro	Asp 100	Glu	Ala	Lys	Ile	Lys 105	Ala	Leu	Leu	Glu	Arg 110	Thr	Gly	
Tyr	Thr	Leu 115	Asp	Val	Thr	Thr	Gly 120	Gln	Arg	Lys	Tyr	Gly 125	Gly	Pro	Pro	
Pro	Asp 130	Ser	Val	Tyr	Ser	Gly 135	Gln	Gln	Pro	Ser	Val 140	Gly	Thr	Glu	Ile	
Phe 145	Val	Gly	Lys	Ile	Pro 150	Arg	Asp	Leu	Phe	Glu 155	Asp	Glu	Leu	Val	Pro 160	
Leu	Phe	Glu	Lys	Ala 165	Gly	Pro	Ile	Trp	Asp 170	Leu	Arg	Leu	Met	Met 175	Asp	
Pro	Leu	Thr	Gly 180	Leu	Asn	Arg	Gly	Tyr 185	Ala	Phe	Val	Thr	Phe 190	Cys	Thr	
Lys	Glu	Ala 195	Ala	Gln	Glu	Ala	Val 200	Lys	Leu	Tyr	Asn	Asn 205	His	Glu	Ile	
Arg	Ser 210	Gly	Lys	His	Ile	Gly 215	Val	Cys	Ile	Ser	Val 220	Ala	Asn	Asn	Arg	
Leu 225	Phe	Val	Gly	Ser	Ile 230	Pro	Lys	Ser	Lys	Thr 235	Lys	Glu	Gln	Ile	Leu 240	
Glu	Glu	Phe	Ser	Lys 245	Val	Thr	Glu	Gly	Leu 250	Thr	Asp	Val	Ile	Leu 255	Tyr	

His	Gln	Pro	Asp 260	Asp	Lys	Lys	Lys	Asn 265	Arg	Gly	Phe	Cys	Phe 270	Leu	Glu
-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----

Tyr	Glu	Asp 275	His	Lys	Thr	Ala	Ala 280	Gln	Ala	Arg	Arg	Arg 285	Leu	Ile	Glu
-----	-----	------------	-----	-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----	-----

Trp

<210> 182

<211> 39

<212> PRT

<213> homo sapiens

<400> 182

Lys 1	Leu	Cys	Thr	Glu 5	Trp	Leu	Lys	Val	Gly 10	Gly	Ile	Trp	Arg	Trp 15	Met
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Arg	Gly	Ser	Cys 20	Leu	Gly	Arg	Leu	Cys 25	Phe	Thr	Trp	Ile	Arg 30	Val	Gly
-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----

Leu	Arg	Glu 35	Glu	Ile	Gly	Val
-----	-----	-----------	-----	-----	-----	-----

<210> 183

<211> 42

<212> PRT

<213> homo sapiens

<400> 183

Glu 1	Ala	Val	Met	Thr 5	Leu	Ile	Leu	Ile	Leu 10	His	Thr	Tyr	Phe	Leu 15	Thr
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Gln	Pro	Tyr	Ser 20	Asn	Pro	Ser	Glu	Ala 25	Lys	Pro	Ser	Gln	Thr 30	Ala	Pro
-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----

Ser	His	Pro 35	Ser	Pro	Tyr	Pro	Pro 40	Asn	Leu
-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----

<210> 184

<211> 60

<212> PRT

<213> homo sapiens

<400> 184

Pro 1	Ser	Phe	Ser	Phe 5	Tyr	Thr	Pro	Ile	Ser 10	Ser	Arg	Asn	Pro	Thr 15	Leu
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Ile	Gln	Val	Lys 20	Gln	Ser	Leu	Pro	Arg 25	Gln	Leu	Pro	Leu	Ile 30	His	Leu
-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----

His	Ile	Pro 35	Pro	Thr	Phe	Asn	His 40	Ser	Val	His	Asn	Phe 45	Tyr	Ser	Leu
-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----

His	Thr	Ser	Tyr	Leu	Leu	Ile	Phe	Leu	Thr	Asn	Lys
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

50

55

60

<210> 185
 <400> 185
 000

<210> 186
 <400> 186
 000

<210> 187
 <400> 187
 000

<210> 188
 <211> 46
 <212> PRT
 <213> homo sapiens

<400> 188

Arg	Ser	Arg	Phe	His	Met	Met	Leu	Thr	Leu	Arg	Ala	Leu	Gln	Leu	Ser
1				5					10					15	
Leu	Pro	Thr	Lys	Ile	Gly	Gly	Ala	Cys	Phe	Arg	Val	Ser	Arg	Leu	Ser
			20					25					30		
Pro	Thr	Glu	Lys	Lys	Lys	Lys	Lys	Met	Ser	Leu	Glu	Glu	Ala		
		35					40					45			

<210> 189
 <211> 65
 <212> PRT
 <213> homo sapiens

<400> 189

Ile	Thr	Phe	Ser	His	Asp	Ala	His	Ala	Gln	Gly	Ala	Ser	Ile	Ile	Pro
1				5					10					15	
Pro	His	Lys	Asp	Arg	Trp	Arg	Val	Phe	Gln	Gly	Leu	Ser	Ser	Leu	Ser
			20					25					30		
Tyr	Arg	Lys	Glu	Lys	Glu	Lys	Asn	Val	Ile	Arg	Arg	Gly	Val	Thr	Arg
		35					40					45			
Gln	Ser	Val	Pro	Arg	Phe	Val	Phe	Pro	Gly	Val	Ala	Glu	Arg	Asp	Gln
	50					55					60				

Phe
 65

<210> 190
 <211> 66
 <212> PRT
 <213> homo sapiens

<400> 190

Glu	Cys	Arg	Glu	Ala	Gly	Pro	Leu	Phe	Leu	Gln	Ser	Arg	Leu	Glu	Leu
1				5					10					15	

Ile Ser Phe Gly His Ser Arg Lys His Lys Pro Gly Asp Gly Leu Thr
20 25 30

Cys Tyr Ala Ser Ser Asn Asp Ile Phe Phe Phe Phe Ser Val Gly
35 40 45

Glu Arg Arg Glu Thr Leu Lys His Ala Pro Pro Ile Phe Val Gly ,Arg
50 55 60

Asp Asn
65

<210> 191
<211> 48
<212> PRT
<213> homo sapiens

<400> 191

Arg Gln Thr Glu Gly Glu Thr Glu Met Leu Arg Lys Pro Ser Tyr Thr
1 5 10 15

Thr Leu Pro Arg Asn Thr Ser Leu Arg Glu Cys Lys Lys Tyr Tyr Trp
20 25 30

Arg Trp Lys Ser Arg Lys Thr Ala Met Gly Arg Arg Pro Arg Gly Asp
35 40 45

<210> 192
<211> 60
<212> PRT
<213> homo sapiens

<400> 192

Arg Ala Glu Thr Arg Ser Gln Gly Gln Leu Asn Glu Asp Lys Leu Lys
1 5 10 15

Gly Lys Leu Arg Cys Leu Glu Ser Pro Ala Ile Gln Leu Tyr Pro Glu
20 25 30

Ile Leu Pro Leu Gly Asn Val Lys Ser Thr Thr Gly Asp Gly Arg Ala
35 40 45

Glu Lys Gln Leu Trp Ala Glu Gly Gln Gly Val Ile
50 55 60

<210> 193
<211> 44
<212> PRT
<213> homo sapiens

<400> 193

Ser Cys Ile Ala Gly Leu Ser Lys His Leu Ser Phe Pro Phe Ser Leu
1 5 10 15

77

Ser	Ser	Leu	Ser 20	Cys	Pro	Trp	Leu	Arg 25	Val	Ser	Ala	Leu	Gln 30	Leu	Leu
-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----

Pro	Leu	Arg 35	Ala	Phe	Pro	Pro	Ala 40	Ser	Asp	Leu	Leu
-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----

<210> 194
 <211> 98
 <212> PRT
 <213> homo sapiens

<400> 194

Glu 1	Ile	Met	Asn	Gly 5	Leu	Val	Leu	Asp	Asn 10	Ile	Trp	Pro	His	Lys 15	Leu
Leu	Thr	Ser	Val 20	Leu	Gly	Glu	Ser	His 25	Phe	Val	Asn	His	Thr 30	Ser	Glu
Ile	Tyr	Met 35	Met	Leu	Asn	Gly	Glu 40	Gln	Arg	Arg	Ser	Cys 45	Cys	Lys	Arg
Cys	Ile 50	Lys	Tyr	Leu	Cys	Cys 55	Phe	Cys	Met	Arg	Leu 60	Arg	Ser	Phe	Ser
His 65	Leu	Ser	Pro	Leu	Phe 70	Pro	Ile	Arg	Ile	Ser 75	Arg	Glu	Ala	Lys	Leu 80
Phe	Cys	Gly	Phe	Gly 85	Asn	Gly	His	Phe	Pro 90	Gly	Lys	Cys	Ile	Trp 95	Ile

Asp Asp

<210> 195
 <211> 115
 <212> PRT
 <213> homo sapiens

<400> 195

Ala 1	His	Ser	Ser	Thr 5	Lys	Ala	Lys	Ser	Lys 10	Ser	Glu	Phe	Leu	Pro 15	Ile
Leu	Pro	Leu	Cys 20	Asn	Thr	Leu	Arg	Ser 25	Ser	His	Asn	Cys	Pro 30	Thr	Pro
His	Leu	Pro 35	Val	Ser	Cys	Cys	Thr 40	Lys	Ser	Pro	Ser	Leu 45	Ser	Ser	Phe
Arg	Tyr 50	Ile	Val	Arg	Gln	Gly 55	Arg	Arg	Ala	Leu	Arg 60	Arg	Arg	Ala	Phe
Glu 65	Ala	Leu	Ser	Thr	Leu 70	Pro	Ala	Ser	Val	Lys 75	Met	Arg	Leu	His	Tyr 80

Ser	Pro	Glu	Lys	Arg 85	Ala	Arg	Phe	78 Ser	His 90	Arg	Ser	Arg	Cys	Ile 95	Phe
Pro	Gly	Asn	Asp 100	His	Ser	Gln	Thr	His 105	Arg	Thr	Val	Trp	Leu 110	Leu	Trp
Ile	Ser	Leu 115													

<210> 196
 <211> 128
 <212> PRT
 <213> homo sapiens
 <400> 196

Ser 1	Gly	Val	Lys	Arg 5	Ile	Ser	Cys	Val	Leu 10	Glu	Thr	Lys	Ala	Tyr 15	Cys
His	Cys	Phe	Lys 20	Lys	Ser	Leu	Cys	Glu 25	Met	Lys	Lys	Asn	Met 30	Thr	Asn
Thr	Gly	Ser 35	His	Thr	Tyr	Thr	Tyr 40	Ile	Gln	Arg	Asn	Leu 45	His	Thr	Cys
Thr	His 50	Thr	Gly	Arg	Tyr	Arg 55	His	Thr	Val	Pro	Pro 60	Lys	Arg	Ser	Pro
Asn 65	Gln	Ser	Ser	Tyr	Arg 70	Phe	Tyr	His	Ser	Val 75	Ile	Leu	Ser	Glu	Val 80
Pro	Thr	Thr	Ala	Gln 85	His	Leu	Thr	Tyr	Pro 90	Phe	Pro	Ala	Ala	Gln 95	Ser
Leu	Leu	His	Ser 100	His	Leu	Phe	Asp	Thr 105	Ser	Ser	Gly	Arg	Ala 110	Glu	Gly
His	Tyr	Ala 115	Ala	Glu	His	Ser	Arg 120	Leu	Ser	Ala	His	Cys 125	Gln	Pro	Ala

<210> 197
 <400> 197
 000
 <210> 198
 <400> 198
 000
 <210> 199
 <400> 199
 000
 <210> 200
 <211> 72
 <212> PRT
 <213> homo sapiens

<400> 200

Arg 1	Pro	Gly	Val	Glu 5	Pro	Pro	Leu	Leu	Arg 10	Arg	Leu	Pro	Asp	Ser 15	Glu
Thr	Gln	Lys	Arg 20	Val	Gln	Gly	Trp	Gly 25	Glu	Met	Trp	Ser	Glu 30	Gly	Arg
Phe	Ala	Phe 35	Glu	Lys	Gly	Ser	Ser 40	Arg	Thr	His	Trp	Asp 45	Ile	Val	Thr
His	Leu 50	Asn	His	Leu	Leu	Ile 55	Glu	Arg	Cys	Trp	Pro 60	Pro	Asn	Asn	Gly
Arg 65	Ser	Gly	Pro	Gly	Pro 70	Arg	Ala								

<210> 201

<211> 77

<212> PRT

<213> homo sapiens

<400> 201

Gly 1	Pro	Ser	Pro	Tyr 5	Ala	Arg	Gly	Pro	Gly 10	Pro	Asp	Leu	Pro	Leu 15	Leu
Gly	Gly	Gln	His 20	Leu	Ser	Ile	Arg	Arg 25	Trp	Phe	Lys	Cys	Val 30	Thr	Met
Ser	Gln	Cys 35	Val	Leu	Glu	Leu	Pro 40	Phe	Ser	Asn	Ala	Asn 45	Leu	Pro	Ser
Leu	His 50	Ile	Ser	Pro	His	Pro 55	Trp	Thr	Arg	Phe	Cys 60	Val	Ser	Glu	Ser
Gly 65	Asn	Leu	Leu	Lys	Arg 70	Gly	Gly	Ser	Thr	Pro 75	Gly	Leu			

<210> 202

<211> 60

<212> PRT

<213> homo sapiens

<400> 202

Glu 1	Ala	Asn	Thr	Phe 5	Leu	Ser	Glu	Asp	Gly 10	Ser	Asn	Val	Leu	Gln 15	Cys
Pro	Ser	Val	Phe 20	Ser	Asn	Phe	Leu	Ser 25	Gln	Met	Gln	Thr	Phe 30	Pro	His
Ser	Thr	Ser 35	Leu	Pro	Ile	Pro	Gly 40	Pro	Val	Ser	Val	Ser 45	Leu	Ser	Gln
Ala	Thr 50	Phe	Ser	Lys	Glu	Gly 55	Val	Pro	Leu	Pro	Ala 60				

<210> 203
 <211> 84
 <212> PRT
 <213> homo sapiens

<400> 203

Pro 1	Thr	Thr	Thr	Leu 5	Val	Ile	Pro	Leu	Phe 10	Phe	Leu	Ser	Ser	Arg 15	Lys
Arg	Lys	Gln	Lys 20	Asp	Ser	Phe	Gln	Thr 25	Ala	Leu	Cys	Ser	Leu 30	His	Cys
Ser	Phe	Pro 35	Lys	Gln	Ala	Ala	Ser 40	Thr	Gly	Lys	Ala	His 45	Val	Val	Thr
Pro	Tyr 50	Phe	Ser	Glu	Val	Leu 55	Leu	Phe	His	Gly	Val 60	Thr	Leu	Leu	Ser
Glu 65	Ser	Lys	Phe	Arg	Lys 70	Gln	Val	Leu	Pro	Leu 75	Ala	Asp	Lys	Asn	His 80
Thr	Ser	Phe	Leu												

<210> 204
 <211> 128
 <212> PRT
 <213> homo sapiens

<400> 204

Cys 1	Asp	Arg	Val	Pro 5	Leu	Phe	Leu	Ser	Tyr 10	Trp	Cys	Ala	Val	Ala 15	Asp
Ser	Trp	Leu	Thr 20	Ala	Ser	Ser	Val	Ser 25	His	Val	Lys	Gly	Ile 30	Leu	Ser
Pro	Gln	Pro 35	Thr	Glu	Cys	Ala	Pro 40	Pro	Gly	Pro	Ala	Asn 45	Cys	Phe	Phe
Asn	Phe 50	Phe	Phe	Phe	Phe	Phe 55	Phe	Leu	Val	Glu	Thr 60	Gly	Ser	Pro	Ser
Val 65	Ala	Gln	Asp	Gly	Leu 70	Glu	Leu	Leu	Gly	Ser 75	Ser	Asn	Pro	Pro	Thr 80
Leu	Ala	Ser	Gln	Ser 85	Ala	Glu	Ile	Thr	Gly 90	Met	Ser	His	Tyr	Ala 95	Gln
Pro	Glu	Gln	Asp 100	Asp	Leu	Asn	Leu	Ile 105	Asn	Ser	Thr	Pro	Lys 110	Gln	Gln
Leu	Ser	Leu 115	Ser	Gln	Gly	Cys	Gln 120	Gly	Gly	Leu	Cys	Glu 125	Gly	Lys	Asp

<210> 205
 <211> 96
 <212> PRT
 <213> homo sapiens

<400> 205

Trp 1	Val	Ala	Gly	Arg 5	Arg	His	Leu	Leu	Ser 10	Val	Gln	Thr	Lys	Ser 15	Leu
Gln	Val	Leu	Gly 20	Leu	Asp	Leu	Cys	Val 25	Thr	Pro	Glu	Ser	Gln 30	Cys	Ile
Arg	Tyr	Leu 35	Tyr	Lys	Lys	Leu	Val 40	Trp	Phe	Leu	Ser	Ala 45	Lys	Gly	Lys
Thr	Cys 50	Phe	Leu	Asn	Leu	Leu 55	Ser	Asp	Asn	Lys	Val 60	Thr	Pro	Trp	Lys
Arg 65	Arg	Thr	Ser	Glu	Lys 70	Tyr	Gly	Val	Thr	Thr 75	Trp	Ala	Phe	Pro	Val 80
Leu	Ala	Ala	Cys	Phe 85	Gly	Lys	Leu	Gln	Cys 90	Arg	Leu	Gln	Arg	Ala 95	Val

<210> 206
 <211> 49
 <212> PRT
 <213> homo sapiens

<400> 206

Pro 1	Asp	Phe	Arg	Gly 5	Phe	Ala	Gly	Pro	Ala 10	Met	Phe	Ser	Arg	Gly 15	Phe
Gln	Val	Gly	Arg 20	Gly	Glu	Arg	Gln	Gly 25	Glu	Asn	Ala	Pro	Cys 30	Arg	Gly
Val	Gln	Arg 35	Ser	Pro	Ala	Ser	Cys 40	Pro	Ala	Val	Gly	Trp 45	Thr	Ser	Asp

Leu

<210> 207
 <211> 56
 <212> PRT
 <213> homo sapiens

<400> 207

Gln 1	Ile	Ser	Gly	Val 5	Leu	Arg	Ala	Pro	Arg 10	Cys	Phe	Pro	Glu	Val 15	Phe
Lys	Trp	Glu	Glu 20	Glu	Ser	Asp	Lys	Val 25	Lys	Met	Pro	Arg	Ala 30	Gly	Ala

Ser Ser Gly Val Leu Pro Ala Val Arg Arg Trp Gly Gly Arg Leu Ile
35 40 45

Tyr Glu Gly Ala His Pro Pro Ile
50 55

<210> 208

<211> 68

<212> PRT

<213> homo sapiens

<400> 208

Cys Cys Ser Cys Gln Ser Ser Gln Val Arg Tyr Ser Asp Arg Trp Met
1 5 10 15

Gly Thr Phe Ile Asn Gln Thr Ser Thr Pro Pro Pro Asp Ser Trp Gln
20 25 30

Asp Ser Ala Gly Arg Pro Gly Thr Gly His Phe His Leu Val Ala Leu
35 40 45

Leu Phe Pro Leu Glu Asn Leu Trp Lys Thr Ser Arg Gly Pro Gln Asn
50 55 60

Pro Gly Asn Leu
65

<210> 209

<211> 164

<212> PRT

<213> homo sapiens

<400> 209

Trp Gly Gly Arg Thr Leu Ala Ser Ala Val Ser Ile Pro Leu Arg Lys
1 5 10 15

Cys His Ser His Arg Pro Thr Val Leu Ala Arg Lys Gln Pro Gln Ser
20 25 30

Gly Val Pro Pro Pro Tyr Thr Ala Ile Ala Ser Pro Asp Ala Ser Gly
35 40 45

Ile Pro Val Ile Asn Cys Arg Val Cys Gln Ser Leu Ile Asn Leu Asp
50 55 60

Gly Lys Leu His Gln His Val Val Lys Cys Thr Val Cys Asn Glu Ala
65 70 75 80

Thr Pro Ile Lys Asn Pro Pro Thr Gly Lys Lys Tyr Val Arg Cys Pro
85 90 95

Cys Asn Cys Leu Leu Ile Cys Lys Asp Thr Ser Arg Arg Ile Gly Cys
100 105 110

Pro	Arg	Pro 115	Asn	Cys	Arg	Arg	Ile 120	Ile	Asn	Leu	Gly	Pro 125	Val	Met	Leu
Ile	Ser 130	Glu	Gly	Thr	Thr	Ser 135	Ser	Ala	Cys	Ile	Ala 140	Gln	Ser	Gln	Pro
Glu 145	Gly	Tyr	Lys	Gly	Arg 150	Val	Leu	Gly	His	Gly 155	Trp	Gly	Thr	His	Ser 160

Leu Trp Asp Gly

<210> 210

<211> 218

<212> PRT

<213> homo sapiens

<400> 210

Ser 1	Ser	Ala	Val	Pro 5	Asp	Gly	Ala	Val	Gly 10	Arg	Pro	Val	Ala	Val 15	Ala
Val	Gly	Gly	Pro 20	Pro	His	Ser	Cys	Arg 25	Cys	Arg	Pro	Cys	Cys 30	Leu	Met
Ala	Ala	Ile 35	Gly	Val	His	Leu	Gly 40	Cys	Thr	Ser	Ala	Cys 45	Val	Ala	Val
Tyr	Lys 50	Asp	Gly	Arg	Ala	Gly 55	Val	Val	Ala	Asn	Asp 60	Ala	Gly	Asp	Arg
Val 65	Thr	Pro	Ala	Val	Val 70	Ala	Tyr	Ser	Glu	Asn 75	Glu	Glu	Ile	Val	Gly 80
Leu	Ala	Ala	Lys	Gln 85	Ser	Arg	Ile	Arg	Asn 90	Ile	Ser	Asn	Thr	Val 95	Met
Lys	Val	Lys	Gln 100	Ile	Leu	Gly	Arg	Ser 105	Ser	Ser	Asp	Pro	Gln 110	Ala	Gln
Lys	Tyr	Ile 115	Ala	Glu	Ser	Lys	Cys 120	Leu	Val	Ile	Glu	Lys 125	Asn	Gly	Lys
Leu	Arg 130	Tyr	Glu	Ile	Asp	Thr 135	Gly	Glu	Glu	Thr	Lys 140	Phe	Val	Asn	Pro
Glu 145	Asp	Val	Ala	Arg	Leu 150	Ile	Phe	Ser	Lys	Met 155	Lys	Glu	Thr	Ala	His 160
Ser	Val	Leu	Gly	Ser 165	Asp	Ala	Asn	Asp	Val 170	Val	Ile	Thr	Val	Pro 175	Phe

Asp	Phe	Gly	Glu 180	Lys	Gln	Lys	Asn	Ala 185	Leu	Gly	Glu	Ala	Ala 190	Arg	Ala
Ala	Gly	Phe 195	Asn	Val	Leu	Arg	Leu 200	Ile	His	Glu	Pro	Ser 205	Ala	Ala	Leu
Leu	Ala 210	Tyr	Gly	Val	Gly	Gln 215	Asp	Ser	Pro						

<210> 211
 <211> 186
 <212> PRT
 <213> homo sapiens
 <400> 211

Arg 1	Lys	Trp	Thr	Leu 5	Thr	Ser	Met	Ser	Gln 10	Lys	Arg	Met	Leu	Lys 15	Arg
Pro	Asp	Asn	Lys 20	Leu	Lys	Tyr	Val	Thr 25	Lys	Trp	Gln	Arg	Thr 30	Ala	Lys
Gln	Ile	Thr 35	His	Pro	Phe	Ser	Arg 40	Asn	Ser	Thr	Met	Ser 45	Ser	Met	Asn
Ile	Thr 50	Ile	Leu	Thr	Ser	Pro 55	Thr	Ser	Ser	Arg	Lys 60	Tyr	Lys	Arg	Ala
Glu 65	Glu	Arg	Arg	Ile	Val 70	Arg	Met	Gly	Glu	Ser 75	Met	Lys	Thr	Tyr	Ala 80
Glu	Val	Asp	Arg	Gln 85	Val	Ile	Pro	Ile	Ile 90	Gly	Lys	Cys	Leu	Asp 95	Gly
Ile	Val	Lys	Ala 100	Ala	Glu	Ser	Ile	Asp 105	Gln	Lys	Asn	Asp	Ser 110	Gln	Leu
Val	Ile	Glu 115	Ala	Tyr	Lys	Ser	Gly 120	Phe	Glu	Pro	Pro	Gly 125	Asp	Ile	Glu
Phe	Glu 130	Asp	Tyr	Thr	Gln	Pro 135	Met	Lys	Arg	Thr	Val 140	Ser	Asp	Asn	Ser
Leu 145	Ser	Asn	Ser	Arg	Gly 150	Glu	Gly	Lys	Pro	Asp 155	Leu	Lys	Phe	Gly	Gly 160
Lys	Ser	Lys	Gly	Lys 165	Leu	Trp	Pro	Phe	Ile 170	Lys	Lys	Asn	Lys	Leu 175	Met
Ser	Leu	Leu	Thr 180	Gly	Gly	Pro	Phe	Ser 185	Phe						


```
<210> 212
<211> 60
<212> PRT
<213> homo sapiens
```

<400> 212

Ile 1	Ser	Gly	Arg	Arg 5	Val	Ser	Leu	Asn	Phe 10	Val	Ser	Glu	Phe	Ser 15	Ile
Thr	Glu	Phe	Cys 20	Pro	Cys	Trp	Cys	Leu 25	Gly	Tyr	Arg	Pro	Asp 30	Gly	Pro
Gly	Ser	Phe 35	Pro	Ser	Cys	Ser	Gly 40	Leu	Glu	Val	Ser	Pro 45	Leu	His	Phe
Leu	Lys 50	Ala	Cys	Val	Gln	Cys 55	Ser	Pro	Lys	Ser	Ile 60				

```
<210> 213
<211> 68
<212> PRT
<213> homo sapiens
```

<400> 213

[illegible]

```
<210> 214
<211> 54
<212> PRT
<213> homo sapiens
```

<400> 214

[illegible]

50

<210> 215
 <211> 276
 <212> PRT
 <213> homo sapiens

<400> 215

Leu 1	Pro	Thr	Ala	Phe 5	Leu	Leu	Ser	Ser	Val 10	Phe	Trp	Ile	Phe	Met 15	Thr
Trp	Phe	Ile	Leu 20	Phe	Phe	Pro	Asp	Leu 25	Ala	Gly	Ala	Pro	Phe 30	Tyr	Phe
Ser	Phe	Ile 35	Phe	Ser	Ile	Val	Ala 40	Phe	Leu	Tyr	Phe	Phe 45	Tyr	Lys	Thr
Trp	Ala 50	Thr	Asp	Pro	Gly	Phe 55	Thr	Lys	Ala	Ser	Glu 60	Glu	Glu	Lys	Lys
Val 65	Asn	Ile	Ile	Thr	Leu 70	Ala	Glu	Thr	Gly	Ser 75	Leu	Asp	Phe	Arg	Thr 80
Phe	Cys	Thr	Ser	Cys 85	Leu	Ile	Arg	Lys	Pro 90	Leu	Arg	Ser	Leu	His 95	Cys
His	Val	Cys	Asn 100	Cys	Cys	Val	Ala	Arg 105	Tyr	Asp	Gln	His	Cys 110	Leu	Trp
Thr	Gly	Arg 115	Cys	Ile	Gly	Phe	Gly 120	Asn	His	His	Tyr	Tyr 125	Ile	Phe	Phe
Leu	Phe 130	Phe	Leu	Ser	Met	Val 135	Cys	Gly	Trp	Ile	Ile 140	Tyr	Gly	Ser	Phe
Ile 145	Tyr	Leu	Ser	Ser	His 150	Cys	Ala	Thr	Thr	Phe 155	Lys	Glu	Asp	Gly	Leu 160
Trp	Thr	Tyr	Leu	Asn 165	Gln	Ile	Val	Ala	Cys 170	Ser	Pro	Trp	Val	Leu 175	Tyr
Ile	Leu	Met	Leu 180	Ala	Thr	Phe	His	Phe 185	Ser	Trp	Ser	Thr	Phe 190	Leu	Leu
Leu	Asn	Gln 195	Leu	Phe	Gln	Ile	Ala 200	Phe	Leu	Gly	Leu	Thr 205	Ser	His	Glu
Arg	Ile 210	Ser	Leu	Gln	Lys	Gln 215	Ser	Lys	His	Met	Lys 220	Gln	Thr	Leu	Ser
Leu	Arg	Lys	Thr	Pro	Tyr	Asn	Leu	Gly	Phe	Met	Gln	Asn	Leu	Ala	Asp

225

230

235

240

Phe	Phe	Gln	Cys	Gly 245	Cys	Phe	Gly	Leu	Val 250	Lys	Pro	Cys	Val	Val 255	Asp
-----	-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----	-----	-----	------------	-----

Trp	Thr	Ser	Gln 260	Tyr	Thr	Met	Val	Phe 265	His	Pro	Ala	Arg	Glu 270	Lys	Val
-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----

Leu	Arg	Ser 275	Val
-----	-----	------------	-----

<210> 216

<211> 49

<212> PRT

<213> homo sapiens

<400> 216

Ser 1	Pro	Ser	Arg	Ser 5	Pro	Val	Val	Phe	Ala 10	Gly	Glu	Phe	Leu	Phe 15	Lys
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

His	Pro	Phe	Val 20	Glu	Glu	Ser	Leu	Met 25	Ser	Phe	Phe	His	Pro 30	Asp	Leu
-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----

His	Leu	Met 35	Asn	Pro	Lys	Ala	Ile 40	Ser	Thr	Gln	Phe	Leu 45	Tyr	Ser	Val
-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----

Phe

<210> 217

<211> 37

<212> PRT

<213> homo sapiens

<400> 217

Lys 1	Glu	Ile	Asn	Asn 5	Tyr	Ile	Arg	Lys	Glu 10	Lys	Asn	Phe	Lys	Tyr 15	Leu
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Gln	Pro	Ser	Thr 20	Pro	Asn	His	Pro	Gln 25	Asp	Arg	Trp	Val	Gln 30	Lys	Asn
-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----

Ala	Pro	Trp 35	Phe	Tyr
-----	-----	-----------	-----	-----

<210> 218

<211> 52

<212> PRT

<213> homo sapiens

<400> 218

Lys 1	Phe	Ser	Ser	Lys 5	Asp	Asp	Arg	Thr	Ser 10	Arg	Arg	Arg	Ser	Ile 15	Ile
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Ile	Ser	Glu	Arg 20	Lys	Lys	Ile	Leu	Ser 25	Ile	Tyr	Asn	Pro	Leu 30	Leu	Leu
-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----

Ile	Thr	Pro	Lys	Ile	Gly	Gly	Ser ⁸⁸ 40	Arg	Lys	Met	His	Leu	Gly	Phe	Thr
		35										45			

Glu	Glu	Arg	Ser
	50		

<210> 219
 <211> 150
 <212> PRT
 <213> homo sapiens

<400> 219

Asp	Lys	Arg	Asn	Gly	Ile	Ile	Ser	Lys	Lys	Leu	Ser	Pro	Glu	Lys	Thr
1				5					10					15	
Thr	Leu	Lys	Ser	Ile	Leu	Lys	Arg	Lys	Gly	Thr	Ser	Asp	Ile	Ser	Asp
			20					25					30		
Glu	Ser	Asp	Asp	Ile	Glu	Ile	Ser	Ser	Lys	Ser	Arg	Val	Arg	Lys	Arg
		35					40					45			
Ala	Ser	Ser	Leu	Arg	Phe	Lys	Arg	Ile	Lys	Glu	Thr	Lys	Lys	Glu	Leu
	50					55					60				
His	Asn	Ser	Pro	Lys	Thr	Met	Asn	Lys	Thr	Asn	Gln	Val	Tyr	Ala	Ala
65					70					75					80
Asn	Glu	Asp	His	Asn	Ser	Gln	Phe	Ile	Asp	Asp	Tyr	Ser	Ser	Ser	Asp
				85					90					95	
Glu	Ser	Leu	Ser	Val	Ser	His	Phe	Ser	Phe	Ser	Lys	Gln	Ser	His	Arg
			100					105					110		
Pro	Arg	Thr	Ile	Arg	Asp	Arg	Thr	Ser	Phe	Ser	Ser	Lys	Leu	Pro	Ser
		115					120					125			
His	Asn	Lys	Lys	Asn	Ser	Thr	Phe	Ile	Pro	Arg	Lys	Pro	Met	Lys	Cys
	130					135					140				
Ser	Asn	Glu	Glu	Ser	Cys										
145					150										

<210> 220
 <211> 83
 <212> PRT
 <213> homo sapiens

<400> 220

Asn	Lys	Trp	Asn	Lys	Ser	Lys	Leu	Gly	Lys	Glu	Ile	Ser	Lys	Ala	Thr
1				5					10					15	
Gln	Ser	Leu	Asp	Pro	Ala	Gln	Leu	Ala	Asp	Pro	Cys	His	Ser	Leu	Ala
			20					25					30		

Val	Ala	Ala	Ser	Leu	Cys	Ser	Leu	Lys	Gly	Glu	Pro	Gly	Gln	Cys	Phe
		35					40					45			
Pro	Ser	Pro	Trp	Ala	Trp	Ser	Leu	His	Ser	Gly	Lys	Gln	Thr	Ser	Gly
	50					55					60				
Pro	Phe	Pro	Lys	Ser	Gln	Glu	Cys	Leu	Ala	Ala	Trp	Trp	Val	Leu	Ile
65					70					75					80

Ala Met Phe

<210> 221
 <211> 83
 <212> PRT
 <213> homo sapiens

<400> 221

Asn	Ser	Lys	Leu	Val	Asp	Cys	Arg	Met	Glu	Thr	Trp	Leu	Leu	Arg	His
1				5					10					15	
Trp	Val	Ser	Phe	Ser	Leu	Cys	Val	Ser	Cys	Trp	Gly	Val	Val	Met	Ile
			20					25					30		
Val	Ser	Ala	Leu	Thr	His	Cys	Thr	Arg	Trp	Gln	Gln	Asp	Thr	Ala	Leu
		35					40					45			
His	Lys	Met	Ala	Ala	Pro	Leu	Gln	Leu	Pro	Pro	Gln	Pro	Pro	Ser	Leu
	50					55					60				
His	Pro	His	Arg	Phe	Gly	Leu	Trp	Phe	Leu	Ser	Ser	Val	Thr	Tyr	Cys
65					70					75					80

Leu Arg Ser

<210> 222
 <211> 90
 <212> PRT
 <213> homo sapiens

<400> 222

Cys	Leu	His	Asn	Arg	Glu	Pro	Asp	Ile	Phe	Arg	Ile	Leu	Ser	Ser	Ser
1				5					10					15	
Tyr	Tyr	Gly	Ile	Leu	Arg	Pro	Arg	Ser	Tyr	Leu	Gln	Thr	Lys	Trp	Pro
			20					25					30		
Trp	Ser	Leu	Gln	Asn	Ile	Ala	Met	Ser	Thr	His	Gln	Ala	Ala	Arg	His
		35					40					45			
Ser	Trp	Asp	Leu	Gly	Lys	Gly	Pro	Leu	Val	Cys	Phe	Pro	Leu	Cys	Ser
	50					55					60				

Asp	Gln	Ala	Gln	Gly	Leu	Gly	Lys	His	Trp	Pro	Gly	Ser	Pro	Phe	Ser
65					70		90			75					80

Glu	His	Arg	Glu	Ala	Ala	Thr	Ala	Arg	Glu
				85					90

<210> 223
 <211> 114
 <212> PRT
 <213> homo sapiens

<400> 223

Gln	Ser	Leu	Arg	His	Cys	Trp	Leu	Asn	Ile	Ser	Leu	Gln	Arg	Asp	Gly
1				5					10					15	

Ala	Phe	Lys	Glu	Pro	Gly	Ala	Gly	Pro	Val	Ser	Ser	Lys	Ala	Leu	Asp
			20					25					30		

Val	Phe	Leu	Val	Arg	Thr	Arg	Arg	Gly	Cys	Gln	Met	Pro	Leu	Lys	Pro
		35					40					45			

Ser	Gly	Leu	Val	Trp	Pro	Arg	Ala	Ala	Gly	Gln	Gly	Arg	Ala	Glu	Lys
	50					55					60				

Trp	Ser	Ser	Ser	Gln	Leu	Ala	Leu	Pro	Ser	Pro	Thr	Gln	Pro	Arg	Pro
65					70					75					80

Arg	Trp	Ser	Leu	Asp	Ser	Ile	Leu	Thr	Ser	Ala	Ser	Pro	Lys	Val	Gln
				85					90					95	

Met	Ser	Lys	Cys	Leu	Val	Val	Gln	Ser	Gln	Glu	Met	Gly	Ser	Tyr	Leu
			100					105					110		

Lys Ser

<210> 224
 <211> 145
 <212> PRT
 <213> homo sapiens

<400> 224

Gly	Cys	Val	Gly	Gly	Gly	Arg	Ala	Glu	Ala	Met	Ala	Glu	Lys	Phe	Asp
1				5					10					15	

His	Leu	Glu	Glu	His	Leu	Glu	Lys	Phe	Val	Glu	Asn	Ile	Arg	Gln	Leu
			20					25					30		

Gly	Ile	Ile	Val	Ser	Asp	Phe	Gln	Pro	Ser	Ser	Gln	Ala	Gly	Leu	Asn
		35					40					45			

Gln	Lys	Leu	Asn	Phe	Ile	Val	Thr	Gly	Leu	Gln	Asp	Ile	Asp	Lys	Cys
	50					55					60				

Arg	Gln	Gln	Leu	His	Asp	Ile	Thr ⁹¹	Val	Pro	Leu	Glu	Val	Phe	Glu	Tyr
65					70					75					80
Ile	Asp	Gln	Gly	Arg	Asn	Pro	Gln	Leu	Tyr	Thr	Lys	Glu	Cys	Leu	Glu
				85					90					95	
Arg	Ala	Leu	Ala	Lys	Asn	Glu	Gln	Val	Lys	Gly	Lys	Ile	Asp	Thr	Met
			100					105					110		
Lys	Lys	Phe	Lys	Ser	Leu	Leu	Ile	Gln	Glu	Leu	Ser	Lys	Val	Phe	Pro
		115					120					125			
Glu	Asp	Met	Ala	Lys	Tyr	Arg	Ser	Ile	Arg	Gly	Glu	Asp	His	Pro	Pro
	130					135					140				
Ser															
145															

<210> 225
 <211> 95
 <212> PRT
 <213> homo sapiens

<400> 225

Gly	Gln	Thr	Met	Arg	Thr	Glu	Gly	Leu	Arg	Gly	Val	Ser	Arg	Ala	Gln
1				5					10					15	
Ser	His	Leu	Ser	Arg	Lys	Val	Ala	Ser	Ala	Leu	Ala	Val	Pro	Ala	Ser
			20					25					30		
Arg	Arg	Ile	Ala	Val	Pro	Gly	Asp	Leu	His	Thr	Gly	Arg	Val	Ser	Trp
		35					40					45			
Leu	Arg	Arg	Arg	Val	Ile	Leu	Pro	Pro	Asp	Ala	Ser	Ile	Leu	Ser	His
	50					55					60				
Val	Phe	Arg	Lys	Tyr	Phe	Arg	Lys	Phe	Leu	Asn	Gln	Gln	Ala	Phe	Lys
65					70					75					80
Phe	Leu	His	Gly	Val	Asp	Leu	Ala	Phe	Asn	Leu	Leu	Ile	Phe	Ser	
				85					90					95	

<210> 226
 <211> 87
 <212> PRT
 <213> homo sapiens

<400> 226

Ala	Leu	Arg	Pro	Pro	Leu	Tyr	Ala	Leu	Gly	Gln	Gln	Val	Gly	Ala	Val
1				5					10					15	
Thr	Gly	Pro	Ala	Asp	Cys	Ser	Ala	Thr	Ala	Pro	Leu	Asp	Phe	Trp	Ile
			20					25					30		

Phe	Trp	Lys 35	Gln	Ser	Gln	Asn	Ser 40	Gly	Leu	Leu	Gly	Gly 45	Trp	Gln	Arg
Gly	Met 50	Val	Arg	Gly	Pro	Pro 55	Phe	Ile	Ser	Leu	Phe 60	Ser	Ile	Arg	Trp
Gln 65	Ser	Thr	Gly	His	Pro 70	Trp	Trp	Val	Ser	Gly 75	Pro	Arg	Pro	Met	Pro 80
Thr	Leu	Pro	Phe	Glu 85	Ser	Arg									

<210> 227
 <211> 79
 <212> PRT
 <213> homo sapiens

<400> 227

Ala 1	Pro	Ala	Leu	Ala 5	Thr	Gln	Pro	Pro	Leu 10	Ser	Leu	Pro	Arg	Gly 15	Thr
Gly	Pro	Ala	Tyr 20	Leu	Asn	Ser	Leu	Thr 25	Leu	Met	Leu	Gln	Thr 30	Trp	Leu
Leu	Asp	Ser 35	Lys	Leu	Leu	Ser	Ser 40	Asn	Val	Leu	Leu	Pro 45	His	Phe	His
Phe	Leu 50	His	Ile	Cys	Leu	Leu 55	Leu	Tyr	Trp	Phe	Leu 60	Leu	Leu	Asn	Leu
Tyr 65	Phe	His	Ser	Trp	Val 70	Leu	Cys	Leu	Pro	Pro 75	Phe	Phe	Ser	Ala	

<210> 228
 <211> 87
 <212> PRT
 <213> homo sapiens

<400> 228

Arg 1	Ser	Met	Ser	Val 5	Glu	Ala	Ser	Phe	Val 10	Cys	Leu	Gly	Thr	Thr 15	Gly
Arg	Cys	Cys	His 20	Trp	Ser	Cys	Arg	Leu 25	Phe	Ser	Asn	Ser	Pro 30	Phe	Gly
Phe	Leu	Asp 35	Ile	Leu	Glu	Thr	Lys 40	Ser	Glu	Gln	Trp	Pro 45	Thr	Gly	Gly
Leu	Ala 50	Glu	Gly	Tyr	Gly	Lys 55	Arg	Thr	Ser	Phe	His 60	Leu	Pro	Val	Gln
His 65	Pro	Met	Ala	Val	His 70	Arg	Ser	Ser	Leu	Val 75	Gly	Val	Arg	Pro	Lys 80

Thr His Ala His Leu Thr Leu
85

<210> 229
<211> 150
<212> PRT
<213> homo sapiens

<400> 229

Ala 1	Thr	Leu	Ser	Arg 5	Phe	Phe	Gly	Arg	Ile 10	Phe	Asn	Leu	Arg	Leu 15	Thr
Gln	Val	Phe	Pro 20	Phe	Leu	Phe	Ser	Ser 25	Pro	Asn	Asp	Lys	Lys 30	Ser	Phe
Cys	Ser	Ile 35	Glu	Gly	Glu	Trp	Asn 40	Gly	Val	Met	Tyr	Ala 45	Lys	Tyr	Ala
Thr	Gly 50	Glu	Asn	Thr	Val	Phe 55	Val	Asp	Thr	Lys	Lys 60	Leu	Pro	Ile	Ile
Lys 65	Lys	Lys	Val	Arg	Lys 70	Leu	Glu	Asp	Gln	Asn 75	Glu	Tyr	Glu	Ser	Arg 80
Ser	Leu	Trp	Lys	Asp 85	Val	Thr	Phe	Asn	Leu 90	Lys	Ile	Arg	Asp	Ile 95	Asp
Ala	Ala	Thr	Glu 100	Ala	Lys	His	Arg	Leu 105	Glu	Glu	Arg	Gln	Arg 110	Ala	Glu
Ala	Arg	Glu 115	Arg	Lys	Glu	Lys	Glu 120	Ile	Gln	Trp	Glu	Thr 125	Arg	Leu	Phe
His	Glu 130	Asp	Gly	Glu	Cys	Trp 135	Val	Tyr	Asp	Glu	Pro 140	Leu	Leu	Lys	Arg
Leu 145	Gly	Ala	Ala	Lys	His 150										

<210> 230
<400> 230
000

<210> 231
<400> 231
000

<210> 232
<400> 232
000

<210> 233
<211> 206
<212> PRT

<213> homo sapiens

<400> 233

Asp 1	Ser	Leu	Arg	Arg 5	Gly	Leu	Gly	Ile	Cys 10	Leu	Trp	Glu	Phe	Ile 15	His
Leu	Ser	Leu	Leu 20	Phe	Thr	Ser	Pro	Lys 25	Pro	Gly	Phe	Pro	Leu 30	Leu	Lys
Pro	Ala	Val 35	Ile	Ser	Gln	Leu	Glu 40	Gly	Gly	Ser	Glu	Leu 45	Gly	Gly	Ser
Ser	Pro 50	Leu	Ala	Ala	Gly	Thr 55	Gly	Leu	Gln	Gly	Ser 60	Gln	Thr	Asp	Ile
Gln 65	Thr	Asp	Asn	Asp	Leu 70	Thr	Lys	Glu	Met	Tyr 75	Glu	Gly	Lys	Glu	Asn 80
Val	Ser	Phe	Glu	Leu 85	Gln	Arg	Asp	Phe	Ser 90	Gln	Glu	Thr	Asp	Phe 95	Ser
Glu	Ala	Ser	Leu 100	Leu	Glu	Lys	Gln	Gln 105	Glu	Val	His	Ser	Ala 110	Gly	Asn
Ile	Lys	Lys 115	Glu	Lys	Ser	Asn	Thr 120	Ile	Asp	Gly	Thr	Val 125	Lys	Asp	Glu
Thr	Ser 130	Pro	Val	Glu	Glu	Cys 135	Phe	Phe	Ser	Gln	Ser 140	Ser	Asn	Ser	Tyr
Gln 145	Cys	His	Thr	Ile	Thr 150	Gly	Glu	Gln	Pro	Ser 155	Gly	Cys	Thr	Gly	Leu 160
Gly	Lys	Ser	Ile	Ser 165	Phe	Asp	Thr	Lys	Leu 170	Val	Lys	His	Glu	Ile 175	Ile
Asn	Ser	Glu	Glu 180	Arg	Pro	Phe	Lys	Cys 185	Glu	Glu	Leu	Val	Glu 190	Pro	Phe
Arg	Cys	Asp 195	Ser	Gln	Leu	Ile	Gln 200	Pro	Ser	Arg	Glu	Gln 205	His		

<210> 234

<400> 234

000

<210> 235

<400> 235

000

<210> 236

<400> 236

000

<210> 237
 <211> 57
 <212> PRT
 <213> homo sapiens

<400> 237

Arg	Ile	Arg	Arg	Ser	Ala	Leu	Ile	Phe	Ser	Lys	Gly	Val	Gln	Arg	Trp
1				5					10					15	
Arg	Arg	Val	Phe	Gly	Arg	Arg	Val	Ser	Pro	Gly	Ser	Gly	Asn	Thr	Glu
			20					25					30		
Ser	Glu	Ala	Ser	Asp	Tyr	Arg	Lys	Lys	Gln	Gly	Thr	Ser	Lys	Val	Phe
		35					40					45			
Gly	Arg	Arg	Val	Leu	Lys	Lys	Ile	Gln							
	50					55									

<210> 238
 <211> 44
 <212> PRT
 <213> homo sapiens

<400> 238

Gly	Thr	Leu	Phe	Phe	Thr	Val	Val	Thr	Gly	Phe	Ala	Leu	Cys	Val	Pro
1				5					10					15	
Ala	Ala	Gly	Thr	Tyr	Pro	Pro	Ser	Glu	Asn	Pro	Pro	Pro	Ser	Leu	Tyr
			20					25					30		
Thr	Leu	Gly	Lys	Asp	Gln	Cys	Arg	Thr	Pro	Asp	Pro				
		35					40								

<210> 239
 <211> 74
 <212> PRT
 <213> homo sapiens

<400> 239

Asn	Leu	Tyr	Pro	Thr	Leu	Glu	Phe	Asn	Pro	Ser	His	Phe	Val	Val	Glu
1				5					10					15	
Leu	Thr	Gly	Phe	Phe	Ser	Thr	Pro	Phe	Phe	Arg	Thr	Pro	Leu	Arg	Tyr
			20					25					30		
Leu	Val	Phe	Tyr	Gly	Ser	His	Trp	Leu	Arg	Ser	Leu	Cys	Ser	Arg	Cys
		35					40					45			
Arg	Asp	Leu	Pro	Ala	Phe	Arg	Lys	Pro	Ala	Ala	Ile	Ser	Val	His	Pro
	50					55					60				
Trp	Lys	Arg	Ser	Val	Gln	Asn	Ala	Gly	Ser						
65					70										

<210> 240

<400> 240
000

<210> 241
<400> 241
000

<210> 242
<400> 242
000

<210> 243
<211> 183
<212> PRT
<213> homo sapiens

<400> 243

Ala 1	Ala	Val	Ala	Phe 5	Gly	Ala	Lys	Gly	Thr 10	Ser	Pro	Ala	Glu	Ala 15	Arg
Ser	Ser	Arg	Gly 20	Ile	Glu	Glu	Ala	Gly 25	Pro	Arg	Ala	His	Gly 30	Arg	Ala
Gly	Arg	Glu 35	Pro	Glu	Arg	Arg	Arg 40	Ser	Arg	Gln	Gln	Arg 45	Arg	Gly	Gly
Leu	Gln 50	Ala	Arg	Arg	Ser	Thr 55	Leu	Leu	Lys	Thr	Cys 60	Ala	Arg	Ala	Arg
Ala 65	Thr	Ala	Pro	Gly	Ala 70	Met	Lys	Met	Val	Ala 75	Pro	Trp	Thr	Arg	Phe 80
Tyr	Ser	Asn	Ser	Cys 85	Cys	Leu	Cys	Cys	His 90	Val	Arg	Thr	Gly	Thr 95	Ile
Leu	Leu	Gly	Val 100	Trp	Tyr	Leu	Ile	Ile 105	Asn	Ala	Val	Val	Leu 110	Leu	Ile
Leu	Leu	Ser 115	Ala	Leu	Ala	Asp	Pro 120	Asp	Gln	Tyr	Asn	Phe 125	Ser	Ser	Ser
Glu	Leu 130	Gly	Gly	Asp	Phe	Glu 135	Phe	Met	Asp	Asp	Ala 140	Asn	Met	Cys	Ile
Ala 145	Ile	Ala	Ile	Ser	Leu 150	Leu	Met	Ile	Leu	Ile 155	Cys	Ala	Met	Ala	Thr 160
Tyr	Gly	Ala	Tyr	Lys 165	Gln	Arg	Ala	Ala	Gly 170	Ser	Ser	His	Ser	Ser 175	Val
Thr	Arg	Ser	Leu 180	Thr	Leu	Pro									

<210> 244

<211> 157
 <212> PRT
 <213> homo sapiens

<400> 244

Cys 1	Gln	His	Val	His 5	Cys	His	Cys	Asp	Phe 10	Ser	Ser	His	Asp	Pro 15	Asp
Met	Cys	Tyr	Gly 20	Tyr	Leu	Arg	Ser	Val 25	Gln	Ala	Thr	Arg	Ser 30	Trp	Ile
Ile	Pro	Phe 35	Phe	Cys	Tyr	Gln	Ile 40	Phe	Asp	Phe	Ala	Leu 45	Asn	Met	Leu
Val	Ala 50	Ile	Thr	Val	Leu	Ile 55	Tyr	Pro	Asn	Ser	Ile 60	Gln	Glu	Tyr	Ile
Arg 65	Gln	Leu	Pro	Pro	Asn 70	Phe	Pro	Tyr	Arg	Asp 75	Asp	Val	Met	Ser	Val 80
Asn	Pro	Thr	Cys	Leu 85	Val	Leu	Ile	Ile	Leu 90	Leu	Phe	Ile	Ser	Ile 95	Ile
Leu	Thr	Phe	Lys 100	Gly	Tyr	Leu	Ile	Ser 105	Cys	Val	Trp	Asn	Cys 110	Tyr	Arg
Tyr	Ile	Asn 115	Gly	Arg	Asn	Ser	Ser 120	Asp	Val	Leu	Val	Tyr 125	Val	Thr	Ser
Asn	Asp 130	Thr	Thr	Val	Leu	Leu 135	Pro	Pro	Tyr	Asp	Asp 140	Ala	Thr	Val	Asn
Gly 145	Ala	Ala	Lys	Glu	Pro 150	Pro	Pro	Pro	Tyr	Val 155	Ser	Ala			

<210> 245
 <400> 245
 000

<210> 246
 <400> 246
 000

<210> 247
 <400> 247
 000

<210> 248
 <400> 248
 000

<210> 249
 <400> 249
 000

<210> 250

<400> 250
000

<210> 251
<211> 81
<212> PRT
<213> homo sapiens

<400> 251

Ala 1	Thr	Lys	Thr	Val 5	Pro	Arg	Gln	Arg	Trp 10	Ser	Pro	Pro	His	Cys 15	Pro
Arg	Pro	Asn	Pro 20	Ser	Leu	Asn	Leu	Leu 25	Arg	Cys	Gly	Trp	Gly 30	Asn	Arg
Gly	Lys	Thr 35	Glu	Ala	Pro	Asp	Ala 40	Phe	Ser	Leu	Leu	Cys 45	Ser	Ser	Ala
Ile	Asp 50	Cys	Pro	Asp	Val	Gln 55	Arg	Glu	Thr	His	Thr 60	Arg	Phe	Ala	His
Glu 65	Asn	Trp	Gly	Ala	Asp 70	Gly	Gln	Ala	Asp	Arg 75	Leu	Cys	Leu	Phe	Ser 80

Glu

<210> 252
<211> 97
<212> PRT
<213> homo sapiens

<400> 252

Gly 1	Val	Asp	Gly	Glu 5	Thr	Glu	Ala	Lys	Leu 10	Arg	His	Leu	Met	His 15	Ser
Ala	Cys	Cys	Ala 20	Ala	Val	Pro	Leu	Thr 25	Ala	Leu	Met	Phe	Arg 30	Glu	Lys
Arg	Thr	Gln 35	Gly	Leu	Pro	Met	Arg 40	Ile	Gly	Glu	Gln	Met 45	Ala	Lys	Gln
Ile	Gly 50	Tyr	Val	Cys	Phe	Leu 55	Ser	Asp	Glu	Val	Arg 60	Lys	Pro	Cys	Gly
Ser 65	Gly	Gly	His	Leu	Trp 70	Phe	Ile	Leu	Phe	Pro 75	Tyr	Pro	Trp	Leu	Leu 80
Glu	Met	Val	Thr	Phe 85	Arg	Thr	Val	Gln	Leu 90	His	Leu	Ser	Glu	His 95	Tyr

Cys

<210> 253
<211> 114

<212> PRT

<213> homo sapiens

<400> 253

Leu	Glu	Ile	Leu	Gly	Ile	Phe	Ser	Arg	Val	Ser	Lys	Leu	Ser	Ser	Ser
1				5					10					15	
Pro	Thr	Asp	Thr	His	Pro	Ser	Ser	Gln	Ile	Gly	Val	Ala	Ile	Leu	Gly
			20					25					30		
Gly	Arg	Val	Val	Tyr	Gly	Thr	Pro	Gly	Cys	Leu	His	Ile	Ser	Gln	Asn
		35					40					45			
Tyr	Pro	Arg	Thr	Ile	Val	Pro	Lys	Ser	Arg	Val	Phe	Thr	Gly	Arg	Gln
	50					55					60				
Asn	Leu	Phe	Ser	Met	Pro	Val	Pro	Gln	Leu	Leu	Ser	Gln	Ile	Pro	Ile
65					70					75					80
Leu	Gly	Ser	His	Gln	Leu	Pro	Ile	Pro	His	Gln	Thr	Ala	Thr	Val	Pro
				85					90					95	
Ser	Leu	Ser	Pro	Tyr	Cys	Ser	Phe	Lys	Ser	Cys	Ser	Gln	Glu	Arg	Asn
			100					105					110		

Cys His

<210> 254

<211> 53

<212> PRT

<213> homo sapiens

<400> 254

Ile	Pro	Ser	Pro	Gln	Gly	Pro	Phe	Cys	Arg	Ser	Tyr	Ser	Asp	Pro	Arg
1				5					10					15	
Lys	Cys	Pro	Phe	Pro	Ile	Val	Val	Leu	Cys	Leu	Trp	Gly	Leu	Val	Tyr
			20					25					30		
Pro	Arg	Gly	Asn	Cys	Gly	Glu	Ile	Ile	Gly	Leu	Arg	Val	Lys	Arg	Ala
		35					40					45			

Leu	Val	Leu	Glu	Leu
	50			

<210> 255

<211> 35

<212> PRT

<213> homo sapiens

<400> 255

Gln	Val	Asp	Thr	Leu	Ile	Ser	Thr	Arg	Lys	Gly	Leu	Lys	Leu	Gln	Asn
1				5					10					15	

Gln Cys Ser Leu Asp Ser Gln Thr Asn Asp Phe Ser Thr Val Thr Pro
 20 25 30

Gly Ile Asp
 35

<210> 256
 <211> 41
 <212> PRT
 <213> homo sapiens

<400> 256

Thr Lys Pro Gln Arg His Arg Thr Thr Met Gly Lys Gly His Phe Leu
 1 5 10 15
 Gly Ser Glu Tyr Asp Leu Gln Asn Gly Pro Cys Gly Leu Gly Ile Tyr
 20 25 30

Pro Tyr Ala Val Pro Trp Ser Asn Ala
 35 40

<210> 257
 <400> 257
 000

<210> 258
 <400> 258
 000

<210> 259
 <400> 259
 000

<210> 260
 <211> 205
 <212> PRT
 <213> homo sapiens

<400> 260

Gly Ser Val Lys Val Pro Ala Ser Pro Arg Pro Gly Gly Thr Ser Leu
 1 5 10 15
 Leu Gly Pro Val Ala Ala Lys Glu Leu Ser Phe Ser Arg Pro Asn Gly
 20 25 30
 Arg Arg Gly Gln Leu Pro Arg Pro Pro Gly Ser Leu Thr Leu Leu Leu
 35 40 45
 Phe Phe Ser Ser Pro Ala Ser Arg Gly Pro Ala Ser Leu Ser Pro Gly
 50 55 60
 Gly Ile Arg Leu Leu Leu Pro Pro Pro Pro His Leu Leu Pro Gly Gln
 65 70 75 80
 Pro Ala Cys Pro Ala Ala Val Met Cys Asp Lys Glu Phe Met Trp Ala
 85 90 95

101

Leu	Lys	Asn	Gly 100	Asp	Leu	Asp	Glu	Val 105	Lys	Asp	Tyr	Val	Ala 110	Lys	Gly
Glu	Asp	Val 115	Asn	Arg	Thr	Leu	Glu 120	Gly	Gly	Arg	Lys	Pro 125	Leu	His	Tyr
Ala	Ala 130	Asp	Cys	Gly	Gln	Leu 135	Glu	Ile	Leu	Glu	Phe 140	Leu	Leu	Leu	Lys
Gly 145	Ala	Asp	Ile	Asn	Ala 150	Pro	Asp	Lys	His	His 155	Ile	Thr	Pro	Leu	Leu 160
Ser	Ala	Val	Tyr	Glu 165	Gly	His	Val	Ser	Cys 170	Val	Lys	Leu	Leu	Leu 175	Ser
Lys	Gly	Ala	Asp 180	Lys	Thr	Val	Lys	Gly 185	Pro	Asp	Gly	Leu	Thr 190	Ala	Phe
Glu	Ala	Thr 195	Asp	Asn	Gln	Ala	Ile 200	Lys	Ala	Leu	Leu	Gln 205			

<210> 261

<400> 261

000

<210> 262

<400> 262

000

<210> 263

<400> 263

000

<210> 264

<211> 180

<212> PRT

<213> homo sapiens

<400> 264

Arg 1	Asn	Met	Ser	Ser 5	Phe	Ser	Arg	Ala	Pro 10	Gln	Gln	Trp	Ala	Thr 15	Phe
Ala	Arg	Ile	Trp 20	Tyr	Leu	Leu	Asp	Gly 25	Lys	Met	Gln	Pro	Pro 30	Gly	Lys
Leu	Ala	Ala 35	Met	Ala	Ser	Ile	Arg 40	Leu	Gln	Gly	Leu	His 45	Lys	Pro	Val
Tyr	His 50	Ala	Leu	Ser	Asp	Cys 55	Gly	Asp	His	Val	Val 60	Ile	Met	Asn	Thr
Arg 65	His	Ile	Ala	Phe	Ser 70	Gly	Asn	Lys	Trp	Glu 75	Gln	Lys	Val	Tyr	Ser 80

Ser His Thr Gly Tyr 85 Pro Gly Gly Phe Arg 90 Gln Val Thr Ala Ala 95 Gln

Leu His Leu Arg 100 Asp Pro Val Ala Ile 105 Val Lys Leu Ala Ile 110 Tyr Gly

Met Leu Pro 115 Lys Asn Leu His Arg 120 Arg Thr Met Met Glu 125 Arg Leu His

Leu Phe 130 Pro Asp Glu Tyr Ile 135 Pro Glu Asp Ile Leu 140 Lys Asn Leu Val

Glu 145 Glu Leu Pro Gln Pro 150 Arg Lys Ile Pro Lys 155 Arg Leu Asp Glu Tyr 160

Thr Gln Glu Glu Ile 165 Asp Ala Phe Pro Arg 170 Leu Trp Thr Pro Pro 175 Glu

Asp Tyr Arg Leu 180

<210> 265

<211> 78

<212> PRT

<213> homo sapiens

<400> 265

Val 1 Ile Gly Tyr Pro 5 Ser Arg Ile Asn Ser 10 Glu Pro Ser Pro Val 15 Ile

Tyr Asn Arg Pro 20 Gly Asn Asn Val Lys 25 Leu Asn Cys Met Ala 30 Met Gly

Ile Ser Lys 35 Ala Asp Ile Thr Trp 40 Glu Leu Thr Asp Lys 45 Ser His Leu

Lys Ala 50 Gly Val Gln Ala Arg 55 Leu Tyr Gly Asn Arg 60 Phe Leu Gln Pro

Gln 65 Gly Ser Met Thr His 70 Ser Ala Cys His Lys 75 Glu Gly Trp

<210> 266

<211> 40

<212> PRT

<213> homo sapiens

<400> 266

Ala 1 Thr Pro Leu Cys 5 Gly Met Leu Asn Gly 10 Ser Leu Ile Pro Gly 15 Val

Glu Glu Ile Cys 20 Phe His Thr Asp Glu 25 Pro Glu Pro Leu Pro 30 Ser Asp

Ala Thr Tyr Pro Leu Thr Pro Thr
35 40

<210> 267
<211> 136
<212> PRT
<213> homo sapiens

<400> 267

Val 1	Gly	Ile	Trp	Gln 5	Glu	Asp	His	Leu	Pro 10	Gln	Ser	Leu	Gly	Phe 15	Leu
Asn	Lys	Lys	Glu 20	Ile	Val	Phe	Leu	Ser 25	Trp	Leu	Leu	Arg	Leu 30	Leu	Lys
Leu	Ala	Leu 35	Pro	Leu	Lys	Tyr	Asp 40	Ile	Ser	Phe	Ala	Val 45	Leu	Asn	Leu
Lys	Leu 50	Val	Ala	Ser	Ser	Val 55	Ala	His	Phe	Gln	Phe 60	Leu	Tyr	Gln	Ala
Ser 65	Leu	Leu	Ser	Phe	Pro 70	Leu	Arg	Met	Gly	Gln 75	Val	Cys	Ser	Gly	Gly 80
His	Ser	Val	Arg	Phe 85	Ser	Arg	Gly	Phe	Gly 90	Arg	Gly	Phe	Lys	Gly 95	Lys
Tyr	Ser	Gly	Gly 100	Arg	Met	Gly	Ser	Gly 105	Val	Lys	Val	Gly	Asp 110	Lys	Gly
Gly	Arg	Ala 115	Lys	Gly	Gly	Val	Glu 120	Gly	Trp	Gly	Pro	Tyr 125	Leu	Asp	Arg
Gly	Met 130	Pro	Gly	Gly	Gln	Gly 135	Lys								

<210> 268
<211> 92
<212> PRT
<213> homo sapiens

<400> 268

Leu 1	Val	Tyr	Pro	Lys 5	Gln	Gly	Thr	Lys	Glu 10	Pro	Gly	Lys	Arg	Ser 15	Gly
His	Val	Lys	Arg 20	Asp	Thr	Gln	Asp	Thr 25	Leu	Arg	Asp	Gln	Ser 30	Gly	Ser
Thr	Pro	Val 35	Leu	Leu	Pro	Glu	Cys 40	Leu	Cys	Val	Asn	Pro 45	Cys	Phe	Leu
Gln	Asn	Lys	Arg	Gln	Gln	Arg	Lys	Leu	Leu	Asn	Gln	Asn	Thr	Asp	Pro

104

50		55		60											
Met 65	Arg	Asn	Gly	Ala	Cys 70	Phe	Cys	Asp	Pro	Gly 75	Glu	Leu	Ser	Ala	Arg 80
Leu	Gln	Glu	Leu	Thr 85	Asp	Gly	Gln	Leu	Leu 90	Ile	Phe				

<210> 269
 <211> 103
 <212> PRT
 <213> homo sapiens

<400> 269

Asn 1	Leu	Val	Tyr	Thr 5	Met	Trp	Leu	Gln	Ile 10	Tyr	Val	Asn	Val	His 15	Phe
Glu	His	Ile	Tyr 20	Val	Leu	Trp	Lys	Glu 25	Met	Leu	Val	Thr	Lys 30	Ile	Arg
Phe	Thr	Leu 35	Lys	Glu	Glu	Glu	Phe 40	Tyr	Ser	Lys	His	Ser 45	Asn	Ile	Leu
Phe	Lys 50	Cys	Phe	Lys	Ile	Gln 55	Ser	Ile	Val	Phe	Lys 60	Val	Ala	Val	Lys
Ala 65	Ser	Thr	Tyr	Val	Lys 70	Thr	Gln	Lys	Glu	Gly 75	Ser	Ser	Asp	Lys	Asn 80
Thr	Ala	Pro	Leu	Leu 85	Cys	Cys	Phe	Ser	Cys 90	Ser	Leu	Tyr	Thr	Leu 95	Ser
Lys	His	Leu	Leu 100	Ser	Gly	Ala									

<210> 270
 <211> 82
 <212> PRT
 <213> homo sapiens

<400> 270

Phe 1	Ile	Tyr	Lys	Gln 5	Ser	Lys	Val	Arg	Asp 10	Ile	Phe	Ala	Val	Thr 15	Leu
Ala	Ile	Leu	Ser 20	Leu	Gln	Ser	Pro	Thr 25	Ser	Arg	Val	Gln	Cys 30	Thr	Ser
Asn	Asn	Ser 35	Leu	Lys	Thr	Arg	His 40	Leu	Thr	Ile	Ser	Val 45	Tyr	Leu	Val
Cys	Lys 50	Val	Asn	Lys	Lys	Ser 55	Ser	Ile	Ile	Lys	Glu 60	Leu	Cys	Phe	Tyr

105

Gln	Arg	Ser	Leu	Pro	Ser	Glu	Phe	Leu	His	Lys	Leu	Met	Pro	Ser	Leu
65					70					75					80

Gln Leu

<210> 271
<400> 271
000

<210> 272
<400> 272
000

<210> 273
<400> 273
000

<210> 274
<211> 95
<212> PRT
<213> homo sapiens

<400> 274

Gln	Gln	His	His	Leu	Pro	Gln	Ser	Leu	Gly	Phe	Leu	Asn	Lys	Lys	Glu
1				5					10					15	
Val	Val	Phe	Leu	Thr	Trp	Leu	Leu	Arg	Leu	Leu	Lys	Leu	Ala	Leu	Pro
			20					25					30		
Leu	Lys	Tyr	Asp	Ile	Ser	Phe	Ala	Val	Leu	Asn	Leu	Lys	Leu	Val	Ala
		35					40					45			
Ser	Ser	Val	Pro	His	Phe	Gln	Phe	Leu	Tyr	Gln	Ala	Ser	Leu	Leu	Ser
	50					55					60				
Phe	Pro	Ile	Arg	Met	Asp	Met	Cys	Cys	Ser	Ala	Cys	His	Val	Cys	Asn
65					70					75					80
Ala	Ser	Cys	Arg	Glu	Phe	Gly	His	Ser	Ile	Lys	Glu	Lys	Ile	Gln	
				85					90					95	

<210> 275
<211> 56
<212> PRT
<213> homo sapiens

<400> 275

Leu	Leu	His	Gln	Tyr	His	Thr	Ser	Ser	Phe	Tyr	Thr	Lys	Pro	Val	Ser
1				5					10					15	
Ser	Val	Phe	Pro	Leu	Glu	Trp	Thr	Cys	Ala	Val	Gln	Arg	Val	Met	Ser
			20					25					30		
Val	Met	Leu	His	Ala	Glu	Ser	Leu	Val	Ile	Val	Leu	Lys	Arg	Lys	Tyr
		35					40					45			

Ser Glu Val Thr Met Ser Pro Glu
 50 55 106

<210> 276
 <211> 69
 <212> PRT
 <213> homo sapiens

<400> 276

His	Ala	Glu	Gln	His	Met	Ser	Ile	Leu	Met	Gly	Lys	Leu	Arg	Arg	Leu
1				5					10					15	
Ala	Trp	Tyr	Arg	Asn	Trp	Lys	Cys	Gly	Thr	Asp	Glu	Ala	Thr	Asn	Phe
			20					25					30		
Lys	Phe	Arg	Thr	Ala	Lys	Leu	Met	Ser	Tyr	Phe	Lys	Gly	Arg	Ala	Asn
		35					40					45			
Phe	Asn	Asn	Leu	Asn	Asn	Gln	Val	Lys	Asn	Thr	Thr	Ser	Phe	Leu	Leu
	50					55					60				
Arg	Asn	Pro	Asn	Asp											
65															

<210> 277
 <211> 95
 <212> PRT
 <213> homo sapiens

<400> 277

Tyr	Ile	Leu	Glu	Ile	Ser	Pro	Leu	Lys	Pro	Ser	Leu	Ala	Pro	Thr	Ser
1				5					10					15	
Cys	Gly	Leu	Met	Pro	Gln	Gly	Phe	Pro	Pro	His	Phe	Cys	Asn	Pro	Arg
			20					25					30		
Tyr	Pro	Ser	Leu	Ser	Thr	Pro	Ser	Gln	Thr	Pro	Thr	Pro	Gly	Ile	Ala
		35					40					45			
Arg	Glu	Asp	Phe	Gly	Leu	Ala	Asn	Cys	Val	Gly	Tyr	Val	Ser	Val	Val
	50					55					60				
Leu	Ile	Arg	Asp	Val	His	Asp	Cys	Gln	Ser	Ala	Phe	Leu	Thr	Ser	Val
65					70					75					80
Thr	Thr	Leu	Leu	Arg	Cys	Asn	Ser	Ser	Gln	Lys	Lys	Thr	Phe	Ser	
				85					90					95	

<210> 278
 <211> 133
 <212> PRT
 <213> homo sapiens

<400> 278

Pro Thr Gln Phe Ala Arg Pro Lys Ser Ser Arg Ala Ile Pro Gly Val

1				5				107				10				15			
Gly	Val	Trp	Asp 20	Gly	Val	Asp	Asn	Glu 25	Gly	Tyr	Leu	Gly	Leu 30	Gln	Lys				
Trp	Gly	Gly 35	Asn	Pro	Trp	Gly	Ile 40	Ser	Pro	Gln	Glu	Val 45	Gly	Ala	Ser				
Asp	Gly 50	Phe	Arg	Gly	Asp	Ile 55	Ser	Asn	Ile	Tyr	Gln 60	Pro	Trp	Ala	Leu				
Ser 65	Pro	Cys	Cys	Ser	Gln 70	His	Gly	Pro	His	Thr 75	Ser	Ser	Leu	Arg	Leu 80				
Thr	Trp	Glu	Leu	Val 85	Arg	Asn	Ala	Gly	Ser 90	Pro	Arg	Ser	Ile	Glu 95	Leu				
Glu	Ala	Val	Leu 100	Thr	Arg	Ser	Pro	Val 105	Ile	Phe	Met	Ala	Gln 110	Ser	Ser				
Phe	Leu	Arg 115	Asp	Arg	Cys	Arg	Leu 120	Leu	Ser	Ala	Gly	Met 125	Arg	His	Pro				
Trp	Gly 130	Arg	Cys	Gly															
<210> 279																			
<211> 102																			
<212> PRT																			
<213> homo sapiens																			
<400> 279																			
Leu 1	Lys	Gln	His	Ser 5	His	Asn	Gln	His	Asn 10	Leu	Leu	Gly	Gln	Ser 15	Leu				
His	Gly	Gln	Ser 20	Leu	Gly	Trp	Glu	Ser 25	Gly	Met	Gly	Trp	Ile 30	Met	Lys				
Asp	Thr	Trp 35	Gly	Cys	Arg	Ser	Gly 40	Val	Gly	Ile	Pro	Gly 45	Ala	Ser	Val				
His	Arg 50	Arg	Trp	Gly	Pro	Ala 55	Met	Ala	Ser	Gly	Val 60	Ile	Phe	Pro	Ile				
Tyr 65	Ile	Ser	Pro	Gly	His 70	Ser	Arg	Pro	Ala	Ala 75	His	Ser	Met	Val	Leu 80				
Thr	Pro	Ala	Ala	Ser 85	Ala	Leu	Pro	Gly	Ser 90	Leu	Leu	Glu	Met	Gln 95	Asp				
Leu	Pro	Asp	Leu 100	Leu	Ser														

```
<210> 280
<400> 280
000
```

```
<210> 281
<400> 281
000
```

$$\begin{array}{ll} \langle 210 \rangle & 282 \\ \langle 400 \rangle & 282 \\ 000 & \end{array}$$

```
<210> 283
<211> 86
<212> PRT
<213> homo sapiens
```

<400> 283

[illegible]

```
<210> 284
<211> 69
<212> PRT
<213> homo sapiens
```

<400> 284

[illegible]

65

<210> 285
 <211> 59
 <212> PRT
 <213> homo sapiens

<400> 285

Leu	Thr	Thr	Ser	Ser	Phe	Glu	His	Ser	Ile	Gly	Phe	Leu	Glu	Ile	Lys
1				5					10					15	
Val	Leu	Phe	Ser	Leu	Leu	Cys	Leu	Gly	Asn	Phe	Glu	Glu	Lys	Leu	Val
			20					25					30		
Leu	Pro	Leu	Thr	Val	Leu	Gly	Leu	Cys	Leu	Cys	Leu	Gln	Lys	Leu	Lys
		35					40					45			
Trp	Leu	Thr	His	Lys	Leu	Ser	Ser	Ala	Ala	Glu					
	50					55									

<210> 286
 <211> 65
 <212> PRT
 <213> homo sapiens

<400> 286

Gly	Lys	Glu	Pro	Gln	Pro	Glu	Ser	Asn	Ser	Ile	Met	Val	Lys	Phe	Pro
1				5					10					15	
Thr	Glu	Ser	Ser	Cys	Glu	Trp	Val	Ile	Arg	Lys	Asn	Glu	Asp	Pro	Lys
			20					25					30		
Asp	Lys	Asn	Gln	Arg	Gln	Met	Gly	Ser	Val	Thr	Gly	Ser	Leu	Ser	Ser
		35					40					45			
Ile	Leu	Asn	Pro	Ile	Glu	Tyr	Cys	Gly	Leu	Thr	Lys	Cys	Gln	Gly	Gly
	50					55					60				

Asp
 65

<210> 287
 <211> 48
 <212> PRT
 <213> homo sapiens

<400> 287

Phe	Leu	Ser	Phe	Gly	Ser	Ser	Phe	Phe	Leu	Ile	Thr	His	Ser	Gln	Asp
1				5					10					15	
Asp	Ser	Val	Gly	Asn	Leu	Thr	Met	Ile	Glu	Leu	Leu	Ser	Gly	Trp	Gly
			20					25					30		
Ser	Phe	Pro	His	Arg	Lys	Asp	Ile	Leu	Lys	Thr	Lys	Lys	Tyr	Leu	Asn
		35					40					45			

<210> 288
 <211> 32
 <212> PRT
 <213> homo sapiens

<400> 288

Ala	Arg	Asn	Ile	Gln	Ser	Asp	Leu	Glu	Trp	Met	Ile	Lys	Ile	Gln	Ser
1				5					10					15	
Gln	Thr	Pro	Ser	Val	Phe	Asp	Phe	Cys	Leu	Leu	Asp	Pro	His	Phe	Ser
			20					25					30		

<210> 289
 <400> 289
 000

<210> 290
 <400> 290
 000

<210> 291
 <400> 291
 000

<210> 292
 <211> 76
 <212> PRT
 <213> homo sapiens

<400> 292

Cys	Ala	Lys	Leu	Glu	Thr	Gly	Phe	Asp	Phe	Leu	Ser	Tyr	Leu	Phe	Ala
1				5					10					15	
Phe	Cys	Ala	Ser	Pro	Ser	Asn	Leu	Val	His	Leu	Ser	Ser	His	Ser	Cys
			20					25					30		
Tyr	Phe	Gln	Val	Lys	Gln	Asp	Ile	Leu	Gly	Val	Lys	Ser	Leu	Trp	Val
		35					40					45			
Phe	Cys	Phe	Tyr	Val	Tyr	Lys	Asn	Gly	Phe	Cys	Val	Pro	Phe	Pro	Cys
	50					55					60				
Lys	Tyr	Gln	Leu	Ile	Trp	Lys	Leu	Thr	Ile	Ile	Met				
65					70					75					

<210> 293
 <211> 63
 <212> PRT
 <213> homo sapiens

<400> 293

Val	Glu	Leu	Ser	Leu	Leu	Phe	Pro	Gln	Leu	Ser	Gln	Leu	Leu	Val	Asn
1				5					10					15	
Phe	Lys	Glu	Ala	Gly	His	Asp	Asp	Ser	His	Leu	Leu	Ser	Gln	Asn	Phe
			20					25					30		

Gly	Arg	Arg	Arg	Trp	Ala	Asp	111 Ser 40	Leu	Ser	Pro	Gly	Val 45	Gln	Asp	Glu
-----	-----	-----	-----	-----	-----	-----	---------------	-----	-----	-----	-----	--------	-----	-----	-----

Pro	Gly 50	Gln	Tyr	Gly	Pro	Thr 55	Ser	Ser	Leu	Thr	Lys 60	His	Pro	His
-----	--------	-----	-----	-----	-----	--------	-----	-----	-----	-----	--------	-----	-----	-----

<210> 294
 <211> 73
 <212> PRT
 <213> homo sapiens

<400> 294

Pro 1	Pro	Lys	Cys	Leu 5	Val	Ser	Leu	Glu	Asn 10	Asn	Met	Asn	Glu	Thr 15	Lys
-------	-----	-----	-----	-------	-----	-----	-----	-----	--------	-----	-----	-----	-----	--------	-----

Asp	Glu	Pro	Asp 20	Tyr	Leu	Val	Thr	His 25	Arg	Arg	Arg	Thr	Ser 30	Ser	Ser
-----	-----	-----	--------	-----	-----	-----	-----	--------	-----	-----	-----	-----	--------	-----	-----

Gly	Asn	Gln 35	Ile	Leu	Phe	Gln	Ala 40	Trp	His	Ile	Lys	Gly 45	Lys	Lys	Gly
-----	-----	--------	-----	-----	-----	-----	--------	-----	-----	-----	-----	--------	-----	-----	-----

Ser	Glu 50	Arg	Arg	Val	Arg	Lys 55	Tyr	His	Leu	Lys	Pro 60	Gln	Lys	Ile	Trp
-----	--------	-----	-----	-----	-----	--------	-----	-----	-----	-----	--------	-----	-----	-----	-----

Gln 65	Lys	Thr	Ala	Ser	Lys 70	Ser	Ile	Arg
--------	-----	-----	-----	-----	--------	-----	-----	-----

<210> 295
 <400> 295
 000

<210> 296
 <400> 296
 000

<210> 297
 <400> 297
 000

<210> 298
 <211> 132
 <212> PRT
 <213> homo sapiens

<400> 298

Pro 1	Leu	Gly	Pro	Ala 5	Ser	Ser	Ala	Phe	Gly 10	Pro	Ser	Gly	Ser	Lys 15	Ser
-------	-----	-----	-----	-------	-----	-----	-----	-----	--------	-----	-----	-----	-----	--------	-----

Arg	Ser	Glu	Glu 20	Gly	Arg	Asp	Gly	Thr 25	Ala	Ser	Pro	Gly	Thr 30	Phe	Lys
-----	-----	-----	--------	-----	-----	-----	-----	--------	-----	-----	-----	-----	--------	-----	-----

Tyr	His	Pro 35	Trp	Ser	Pro	Leu	Ser 40	Ser	Leu	Arg	Glu	Trp 45	Thr	Ser	Gln
-----	-----	--------	-----	-----	-----	-----	--------	-----	-----	-----	-----	--------	-----	-----	-----

Ser	Thr 50	Ser	Ser	Gly	Leu	Ser 55	Asp	Leu	Leu	Leu	Cys 60	Leu	Tyr	Gln	Pro
-----	--------	-----	-----	-----	-----	--------	-----	-----	-----	-----	--------	-----	-----	-----	-----

112

Trp Gln Gly Ser Arg Ile His Leu Val Gly Ser Gly Pro Ser Gln Tyr
65 70 75 80

His Trp Gly Ser Asn Lys Phe Leu Glu Pro Gln Ser Leu Gly Pro Gly
85 90 95

Ser Gln Leu Ile Gly Asp Gly Val Pro Phe Gln Ala Arg Ala Glu Phe
100 105 110

Gly Thr Ser Gly His Glu Leu Glu Gly Asn Ser Val Ser Tyr Glu Leu
115 120 125

Gly Pro Trp Pro
130

<210> 299

<211> 70

<212> PRT

<213> homo sapiens

<400> 299

Glu Ser Arg Arg Gly Ala Leu Ala Gly Pro Leu Ser Lys Ala Gly Glu
1 5 10 15

Gly Arg Pro Gly Trp Tyr Leu Asn Val Pro Gly Met Leu Ser His Pro
20 25 30

Phe Leu Pro His Ser Tyr Ser Leu Thr Leu Met Ala Lys Ala Arg Asp
35 40 45

Ala Gly Pro Lys Gly Lys Asn Val Leu Ser Val Phe Ser Gly Phe Tyr
50 55 60

Ser Leu Val Ser Leu His
65 70

<210> 300

<211> 143

<212> PRT

<213> homo sapiens

<400> 300

Gly Val Lys Ala Arg Glu Tyr Arg Glu Asp Val Phe Thr Phe Arg Ala
1 5 10 15

Cys Val Ser Gly Phe Gly His Gln Gly Gln Arg Val Gly Val Arg Lys
20 25 30

Glu Gly Met Gly Gln His Pro Trp Asp Val Gln Val Pro Ser Trp Ser
35 40 45

Pro Phe Ser Ser Leu Arg Glu Trp Thr Ser Gln Ser Thr Ser Ser Gly
50 55 60

Leu 65	Ser	Asp	Leu	Leu	Leu 70	Cys	Leu	Tyr	Gln	Pro 75	Trp	Gln	Gly	Ser	Arg 80
Ile	His	Leu	Val	Gly 85	Ser	Gly	Pro	Ser	Gln 90	Tyr	His	Trp	Gly	Ser 95	Asn
Lys	Phe	Leu	Glu 100	Pro	Gln	Ser	Leu	Gly 105	Pro	Gly	Ser	Gln	Leu 110	Ile	Ala
Asp	Gly	Val 115	Pro	Phe	Lys	Leu	Val 120	Pro	Ala	Arg	Ala	Glu 125	Phe	Gly	Thr
Ser	Leu 130	Lys	Gly	Asn	Ser	Val 135	Thr	Tyr	Glu	Leu	Gly 140	Pro	Trp	Pro	
<210> 301															
<400> 301															
000															
<210> 302															
<400> 302															
000															
<210> 303															
<400> 303															
000															
<210> 304															
<211> 408															
<212> PRT															
<213> homo sapiens															
<400> 304															
Phe 1	Ala	Asn	Trp	Glu 5	Phe	Met	Gly	Thr	Glu 10	Gln	Leu	Gln	Pro	Gln 15	Leu
Pro	Ser	Pro	Lys 20	Val	Trp	Ser	Cys	Arg 25	Gly	Cys	Arg	Gln	Gly 30	Pro	Thr
Lys	Phe	Asn 35	Gln	Val	Ser	Arg	Met 40	Gln	Thr	Pro	Ala	Pro 45	Val	Ser	Arg
Arg	Val 50	Gly	Leu	Ala	Val	Ser 55	Leu	Thr	Pro	Pro	Pro 60	Ser	Gly	Gln	Ser
Gly 65	Pro	Ser	Val	Met	Gly 70	Lys	Ala	Ala	Ala	Cys 75	Pro	Ala	Thr	Pro	Ala 80
Ser	Ala	Pro	Ser	Gln 85	Gly	Leu	Ser	Phe	Gly 90	Gly	Pro	Val	Ser	Cys 95	Trp
Pro	Gly	Ser	Pro 100	Leu	Leu	His	Leu	Ile 105	Gly	Gly	Arg	Gln	Leu 110	Leu	Asp

Leu	Cys	Pro 115	Gly	Cys	Gly	Arg	Ser 120	Leu	Pro	Phe	Ser	Ser 125	Ser	Ser	Ser
Ser	Ser 130	Val	Ser	Asn	Asp	Ser 135	Ala	Pro	Asp	Gly	Pro 140	Arg	Gly	Leu	Gly
Cys 145	Phe	Gly	Gly	Val	Val 150	Leu	Gly	Gly	Arg	Gly 155	Phe	Lys	Tyr	Leu	Leu 160
Tyr	Phe	Leu	Phe	Val 165	Ala	Ala	Thr	Gln	Gln 170	Ile	Leu	Leu	Leu	Gly 175	Arg
Ala	Ser	Ala	Phe 180	Leu	Lys	Arg	Asp	Val 185	Gly	Asp	Pro	Leu	Val 190	Val	Ala
Pro	Ala	Phe 195	Phe	Ala	Val	Ala	Gly 200	His	Leu	His	Gln	Ala 205	Val	Ala	Leu
Pro	Gly 210	Val	Arg	Val	Arg	Val 215	Arg	Asp	Gln	Glu	Thr 220	Met	Gln	Val	Ser
Gly 225	Leu	Gly	Gly	Ala	Leu 230	Gly	Leu	Gly	Arg	Leu 235	Ser	Gln	Glu	Leu	Arg 240
Gln	Ala	Leu	His	Ala 245	Arg	His	Pro	His	Asp 250	Val	Asp	Val	Val	Val 255	Thr
Ala	Glu	Gly	Leu 260	Asp	Glu	Arg	Glu	Val 265	Asp	Leu	Gln	Gly	Asp 270	Val	Ile
Leu	Leu	Leu 275	Leu	Val	Asn	Gly	Gln 280	Glu	Ala	Glu	Asp	His 285	Ala	Val	Trp
Val	His 290	Ile	His	Gln	Leu	Gly 295	Arg	Leu	Val	His	Pro 300	His	Cys	Glu	Ala
Ile 305	Leu	Ala	Leu	Ser	Gly 310	His	Gln	Lys	Leu	Leu 315	His	Arg	Gly	Gly	His 320
Arg	Leu	His	Leu	Leu 325	Arg	Arg	Val	Val	Ala 330	Arg	His	Glu	Leu	Phe 335	Gln
Arg	His	Val	Ala 340	Ile	Ile	Ile	His	Ser 345	Gly	Cys	Gly	Ser	Thr 350	Ala	Val
Pro	Arg	Glu 355	Lys	Leu	Gln	Asn	Pro 360	Ser	Gln	Arg	Ala	Gln 365	Asn	Leu	Pro

Thr	Glu	Leu	Glu	Arg	Ser	Ser	Lys	Thr	Phe	Gly	Lys	Gln	Arg	Asn	Pro
	370					375					380				
Ser	Arg	Lys	Gly	Gly	Lys	Ile	Tyr	Cys	Lys	Val	Leu	Gly	Glu	Asp	Asn
385					390					395					400
Pro	Gly	Ser	Cys	Gly	Asn	Gln	Arg								
				405											

<210> 305
 <211> 169
 <212> PRT
 <213> homo sapiens

<400> 305

Gly	Trp	Gly	Val	Trp	Gln	Ala	Gly	Leu	Asp	Pro	Val	Leu	Gly	Pro	Pro
1				5					10					15	
Ser	Ser	Ala	Val	Pro	Ser	Leu	Leu	Leu	Gly	Val	Val	Ser	Met	Val	Trp
			20					25					30		
Pro	His	Leu	Gln	Leu	Cys	Leu	Ser	Ala	Val	Pro	Leu	Ala	Ser	Ser	Ser
		35					40					45			
Leu	Asn	Ser	Ala	Ala	Trp	Ser	Pro	Val	Ser	Ser	Arg	Ala	Arg	Gln	Gly
	50					55					60				
Trp	Gly	Gly	Trp	Cys	Trp	Gln	Gln	Leu	Leu	Ser	Trp	Cys	Asp	Leu	Ser
65					70					75					80
Gly	Leu	His	Leu	Arg	Gly	Arg	Asn	Gly	Pro	Gly	Tyr	Arg	Gly	Gln	Ile
				85					90					95	
His	Pro	Gly	Trp	Ser	Pro	Arg	Pro	Pro	Gly	Leu	Gly	Ala	Ala	Gly	Gly
			100					105					110		
Arg	Trp	Leu	Leu	Val	Gly	Arg	Trp	Pro	Ser	Cys	Leu	Ala	Cys	Leu	Pro
		115					120					125			
Cys	Leu	Ser	Ser	Ser	Pro	Asn	Ala	Leu	Ser	Val	Ser	Ala	Phe	Leu	Ala
	130					135					140				
Pro	Gly	Leu	Ser	Thr	Pro	Ser	Ala	Tyr	Lys	Ala	Val	Ser	Pro	Pro	Gln
145					150					155					160
Thr	Thr	Val	Trp	Leu	Gln	Pro	Ile	Arg							
				165											

<210> 306
 <211> 120
 <212> PRT
 <213> homo sapiens

<400> 306

Ile 1	Leu	Gln	Leu	Gly 5	His	Gln	Phe	Pro	Leu 10	Val	Pro	Ala	Arg	Ala 15	Gly
Ala	Val	Gly	Val 20	Gly	Ser	Ser	Phe	Ser 25	Leu	Gly	Ala	Thr	Phe 30	Pro	Ala
Ser	Thr	Ser 35	Glu	Val	Gly	Met	Gly 40	Gln	Ala	Ile	Glu	Val 45	Arg	Phe	Ile
Gln	Ala 50	Gly	Val	Leu	Val	Leu 55	Arg	Ala	Trp	Gly	Leu 60	Leu	Gly	Gly	Ala
Gly 65	Cys	Trp	Trp	Glu	Gly 70	Gly	His	Arg	Ala	Trp 75	Leu	Val	Phe	Pro	Ala 80
Ser	Leu	Leu	Leu	Leu 85	Thr	Leu	Cys	Leu	Ser 90	Leu	Leu	Ser	Trp	Pro 95	Arg
Ala	Ser	Pro	Leu 100	Pro	Gln	Leu	Ile	Arg 105	Leu	Cys	Leu	Leu	Leu 110	Arg	Pro
Gln	Ser	Gly 115	Ser	Ser	Pro	Ser	Gly 120								

<210> 307

<211> 472

<212> PRT

<213> homo sapiens

<400> 307

Ser 1	Glu	Ser	Leu	Thr 5	His	Pro	Gly	Glu	Glu 10	Pro	Gly	Gly	Pro	Pro 15	Pro
Gly	Gly	Ala	Pro 20	Thr	Met	Ala	Thr	Pro 25	Leu	Val	Ala	Gly	Pro 30	Ala	Ala
Leu	Arg	Phe 35	Ala	Ala	Ala	Ala	Ser 40	Trp	Gln	Val	Val	Arg 45	Gly	Arg	Cys
Val	Glu 50	His	Phe	Pro	Arg	Val 55	Leu	Glu	Phe	Leu	Arg 60	Ser	Leu	Arg	Ala
Val 65	Ala	Pro	Gly	Leu	Val 70	Arg	Tyr	Arg	His	His 75	Glu	Arg	Leu	Cys	Met 80
Gly	Leu	Lys	Ala	Lys 85	Val	Val	Val	Glu	Leu 90	Ile	Leu	Gln	Gly	Arg 95	Pro
Trp	Ala	Gln	Val 100	Leu	Lys	Ala	Leu	Asn 105	His	His	Phe	Pro	Glu 110	Ser	Gly

Pro	Ile	Val 115	Arg	Asp	Pro	Lys	Ala 120	Thr	Lys	Gln	Asp	Leu 125	Arg	Lys	Ile
Leu	Glu 130	Ala	Gln	Glu	Thr	Phe 135	Tyr	Gln	Gln	Val	Lys 140	Gln	Leu	Ser	Glu
Ala 145	Pro	Val	Asp	Leu	Ala 150	Ser	Lys	Leu	Gln	Glu 155	Leu	Glu	Gln	Glu	Tyr 160
Gly	Glu	Pro	Phe	Leu 165	Ala	Ala	Met	Glu	Lys 170	Leu	Leu	Phe	Glu	Tyr 175	Leu
Cys	Gln	Leu	Glu 180	Lys	Ala	Leu	Pro	Thr 185	Pro	Gln	Ala	Gln	Gln 190	Leu	Gln
Asp	Val	Leu 195	Ser	Trp	Met	Gln	Pro 200	Gly	Val	Ser	Ile	Thr 205	Ser	Ser	Leu
Ala	Trp 210	Arg	Gln	Tyr	Gly	Val 215	Asp	Met	Gly	Trp	Leu 220	Leu	Pro	Glu	Cys
Ser 225	Val	Thr	Asp	Ser	Val 230	Asn	Leu	Ala	Glu	Pro 235	Met	Glu	Gln	Asn	Pro 240
Pro	Gln	Gln	Gln	Arg 245	Leu	Ala	Leu	His	Asn 250	Pro	Leu	Pro	Lys	Ala 255	Lys
Pro	Gly	Thr	His 260	Leu	Pro	Gln	Gly	Pro 265	Ser	Ser	Arg	Thr	His 270	Pro	Glu
Pro	Leu	Ala 275	Gly	Arg	His	Phe	Asn 280	Leu	Ala	Pro	Leu	Gly 285	Arg	Arg	Arg
Val	Gln 290	Ser	Gln	Trp	Ala	Ser 295	Thr	Arg	Gly	Gly	His 300	Lys	Glu	Arg	Pro
Thr 305	Val	Met	Leu	Phe	Pro 310	Phe	Arg	Asn	Leu	Gly 315	Ser	Pro	Thr	Gln	Val 320
Ile	Ser	Lys	Pro	Glu 325	Ser	Lys	Glu	Glu	His 330	Ala	Ile	Tyr	Thr	Ala 335	Asp
Leu	Ala	Met	Gly 340	Thr	Arg	Ala	Ala	Ser 345	Thr	Gly	Lys	Ser	Lys 350	Ser	Pro
Cys	Gln	Thr 355	Leu	Gly	Gly	Arg	Ala 360	Leu	Lys	Glu	Asn	Pro 365	Val	Asp	Leu

Pro	Ala	Thr	Glu	Gln	Lys	Glu	Asn	Cys	Leu	Asp	Cys	Tyr	Met	Asp	Pro
	370					375					380				
Leu	Arg	Leu	Ser	Leu	Leu	Pro	Pro	Arg	Ala	Arg	Lys	Pro	Val	Cys	Pro
385					390					395					400
Pro	Ser	Leu	Cys	Ser	Ser	Val	Ile	Thr	Ile	Gly	Asp	Leu	Val	Leu	Asp
				405					410					415	
Ser	Asp	Glu	Glu	Glu	Asn	Gly	Gln	Gly	Glu	Gly	Lys	Glu	Ser	Leu	Glu
			420					425					430		
Asn	Tyr	Gln	Lys	Thr	Lys	Phe	Asp	Thr	Leu	Ile	Pro	Thr	Leu	Cys	Glu
		435					440					445			
Tyr	Leu	Pro	Pro	Ser	Gly	His	Gly	Ala	Ile	Pro	Val	Ser	Ser	Cys	Asp
	450					455					460				
Cys	Arg	Asp	Ser	Ser	Arg	Pro	Leu								
465					470										

<210> 308

<211> 138

<212> PRT

<213> homo sapiens

<400> 308

Pro	Gly	Phe	Ala	Leu	Arg	Gly	Ala	Ile	Gly	Pro	Arg	Glu	Gly	Arg	Gly
1				5					10					15	
Gly	Gly	Arg	Gly	Tyr	Arg	Arg	Ser	Ser	Gly	Arg	Gln	Pro	Leu	Val	Ser
			20					25					30		
Trp	Gln	Arg	Gln	Ala	Arg	Cys	Gly	Ser	Gly	Gly	Ala	Met	Ser	Phe	Cys
		35					40					45			
Ser	Phe	Phe	Gly	Gly	Glu	Val	Phe	Gln	Asn	His	Phe	Glu	Pro	Gly	Val
	50					55					60				
Tyr	Val	Cys	Ala	Lys	Cys	Gly	Tyr	Glu	Leu	Phe	Ser	Ser	Arg	Ser	Lys
65					70					75					80
Tyr	Ala	His	Ser	Ser	Pro	Trp	Pro	Ala	Phe	Thr	Glu	Thr	Ile	His	Ala
				85					90					95	
Asp	Ser	Val	Ala	Lys	Arg	Pro	Glu	His	Asn	Arg	Ser	Glu	Ala	Leu	Lys
			100					105					110		
Val	Ser	Cys	Gly	Lys	Cys	Gly	Asn	Gly	Leu	Gly	His	Glu	Phe	Leu	Asn
		115					120					125			

Asp Gly Pro Lys Pro Gly Gln Ser Arg Phe
130 135

<210> 309
<211> 121
<212> PRT
<213> homo sapiens

<400> 309

Ser	Tyr	Gly	Ala	Thr	Ala	Ala	Phe	Leu	Ser	Arg	Ser	Glu	Ala	Ser	Tyr
1				5					10					15	
Phe	Arg	Thr	Asp	Cys	Glu	Thr	Gly	Phe	Arg	Phe	Leu	Pro	Ser	Trp	Thr
			20					25					30		
Arg	Gly	Gln	Gly	Cys	Ala	Pro	Ser	Ala	Cys	Leu	Pro	Ser	Arg	Ser	Gln
		35					40					45			
Thr	Ile	Pro	Thr	Leu	Ala	Gly	Leu	Glu	Gly	Phe	Asp	Gln	Ser	Gly	Ser
	50					55					60				
Cys	Ser	Asp	Gln	Gly	Gln	Gly	Gly	Trp	Gln	Gly	Arg	Pro	Pro	Phe	Pro
65					70					75					80
Phe	Cys	Leu	Leu	Ser	Ser	Leu	Gly	Asp	Val	Gly	Leu	Ser	Phe	Gly	Glu
				85					90					95	
Asp	Glu	Ser	Leu	Ser	Trp	Asn	Trp	Ala	Ser	Gln	Gly	Arg	Val	Gln	Arg
			100					105					110		
Gln	Gly	Gln	Glu	Lys	Lys	Val	Arg	Val							
		115					120								

<210> 310
<211> 249
<212> PRT
<213> homo sapiens

<400> 310

Ser	Glu	Gln	Gly	Ala	Lys	Ser	Ala	Asp	Ser	Val	Ala	Ala	Gln	Pro	Arg
1				5					10					15	
Pro	Val	Pro	Ala	Glu	Gly	Met	Asn	His	Gln	Gln	Met	Ser	Leu	Phe	Ser
			20					25					30		
Lys	Lys	Arg	Lys	Gly	Leu	Val	Gln	Ser	Arg	Gly	Leu	Gly	Ser	Val	Leu
		35					40					45			
Met	Phe	Gln	Pro	Leu	Arg	Pro	Ala	Phe	Leu	Ser	Arg	Arg	Pro	Gly	Phe
	50					55					60				
Gln	Leu	Gln	Gly	Gly	Met	Ala	Asn	Val	Trp	Pro	Gln	Cys	Gly	Gly	Arg
65					70					75					80

Leu	Gly	Trp	Val	Trp 85	Ala	Ala	Arg	Leu	Val 90	Thr	Leu	Gly	Gly	Arg 95	Ser
Phe	Phe	Ala	Phe 100	Arg	Asp	Lys	Leu	Gln 105	Arg	Ala	Ala	Glu	Tyr 110	Ser	Glu
Ser	Gly	Leu 115	Pro	Arg	Leu	Gly	Ala 120	Val	Val	Gln	Glu	Leu 125	Val	Ala	Gln
Pro	Ile 130	Ala	Thr	Leu	Ala	Thr 135	Gly	His	Leu	Gln	Gly 140	Phe	Arg	Ser	Ile
Val 145	Leu	Arg	Thr	Leu	Gly 150	His	Ala	Val	Gly	Val 155	Asn	Gly	Leu	Gly	Glu 160
Arg	Arg	Pro	Trp	Arg 165	Arg	Val	Cys	Ile	Leu 170	Arg	Ala	Ala	Gly	Glu 175	Gln
Leu	Ile	Ala	Thr 180	Leu	Gly	Thr	His	Val 185	Asn	Ala	Arg	Phe	Lys 190	Val	Ile
Leu	Glu	Asn 195	Leu	Ala	Pro	Glu	Glu 200	Ala	Ala	Glu	Arg	His 205	Gly	Ala	Thr
Gly	Thr 210	Ala	Ala	Arg	Leu	Pro 215	Leu	Pro	Thr	Asp	Gln 220	Arg	Leu	Pro	Thr
Arg 225	Arg	Pro	Pro	Val	Pro 230	Ala	Ser	Thr	Ser	Pro 235	Pro	Leu	Pro	Arg	Thr 240
Asn	Arg	Ser	Pro	Glu 245	Gly	Glu	Ser	Arg							
<210>	311														
<211>	204														
<212>	PRT														
<213>	homo sapiens														
<400>	311														
Leu 1	Gly	Ser	Ser	Trp 5	Ile	Phe	Val	Asn	Leu 10	Thr	Val	Arg	Phe	Cys 15	Ile
Leu	Gly	Lys	Glu 20	Ser	Phe	Tyr	Asp	Thr 25	Phe	His	Thr	Val	Ala 30	Asp	Met
Met	Tyr	Phe 35	Cys	Gln	Met	Leu	Ala 40	Val	Val	Glu	Thr	Ile 45	Asn	Ala	Ala
Ile	Gly 50	Val	Thr	Thr	Ser	Pro 55	Val	Leu	Pro	Ser	Leu 60	Ile	Gln	Leu	Leu

Gly 65	Arg	Asn	Phe	Ile	Leu 70	Phe	Ile	Ile	Phe	Gly 75	Thr	Met	Glu	Glu	Met 80
Gln	Asn	Lys	Ala	Val 85	Val	Phe	Phe	Val	Phe 90	Tyr	Leu	Trp	Ser	Ala 95	Ile
Glu	Ile	Phe	Arg 100	Tyr	Ser	Phe	Tyr	Met 105	Leu	Thr	Cys	Ile	Asp 110	Met	Asp
Trp	Lys	Val 115	Leu	Thr	Trp	Leu	Arg 120	Tyr	Thr	Leu	Trp	Ile 125	Pro	Leu	Tyr
Pro	Leu 130	Gly	Cys	Leu	Ala	Glu 135	Ala	Val	Ser	Val	Ile 140	Gln	Ser	Ile	Pro
Ile 145	Phe	Asn	Glu	Thr	Gly 150	Arg	Phe	Ser	Phe	Thr 155	Leu	Pro	Tyr	Pro	Val 160
Lys	Ile	Lys	Val	Arg 165	Phe	Ser	Phe	Phe	Leu 170	Gln	Ile	Tyr	Leu	Ile 175	Met
Ile	Phe	Leu	Gly 180	Leu	Tyr	Ile	Asn	Phe 185	Arg	His	Leu	Tyr	Lys 190	Gln	Arg
Arg	Arg	Arg 195	Tyr	Gly	Gln	Lys	Lys 200	Lys	Lys	Ile	His				

<210> 312

<211> 155

<212> PRT

<213> homo sapiens

<400> 312

Arg 1	Ile	Ser	Gly	Cys 5	Ser	Pro	Arg	Ser	Ser 10	Cys	Cys	Phe	Gln	Cys 15	Pro
Thr	Ala	Asp	Arg 20	Phe	Lys	Lys	Pro	Thr 25	Glu	Gln	Gln	Gln	Asn 30	Glu	Val
Phe	Leu	Arg 35	Ser	Ile	Gln	Lys	Cys 40	Thr	Val	Pro	Pro	Leu 45	Thr	Arg	Thr
Ser	Thr 50	Gln	Val	Asn	Gly	Leu 55	Ser	Gln	Cys	Arg	Arg 60	Trp	Lys	Ala	Ala
Ile 65	Phe	Tyr	Val	Cys	Ala 70	Gln	Pro	Tyr	Ser	Leu 75	Glu	Val	Cys	Leu	Ala 80
Tyr	Ser	Asn	Ile	Ser 85	Ser	Leu	Ser	Lys	Ala 90	Val	His	Cys	Tyr	Cys 95	Gln

Phe Asp Leu His Thr Val Phe Pro Leu Asp Pro Cys Tyr His Leu Asp
100 105 110

Leu Val Cys Val Cys Val Tyr Val Cys Leu Cys Val Cys Gly Leu Val
115 120 125

Trp Phe Glu Thr Gly Ser Cys Thr Val Thr Pro Gly Cys Ser Ala Val
130 135 140

Ala Gln Ser Arg Leu Thr Ala Ala Leu Thr Ser
145 150 155

<210> 313

<211> 70

<212> PRT

<213> homo sapiens

<400> 313

Ala Val Met Asp Gln Val Met Gln Phe Val Glu Pro Ser Arg Gln Phe
1 5 10 15

Val Lys Asp Ser Ile Arg Leu Val Lys Arg Cys Thr Lys Pro Asp Arg
20 25 30

Lys Glu Phe Gln Lys Ile Ala Met Ala Thr Ala Ile Gly Phe Ala Ile
35 40 45

Met Gly Phe Ile Gly Phe Phe Val Lys Leu Ile His Ile Pro Ile Asn
50 55 60

Asn Ile Ile Val Gly Gly
65 70

<210> 314

<211> 112

<212> PRT

<213> homo sapiens

<400> 314

Phe Arg Asn Arg Lys His Leu Glu Arg Lys Lys Lys Asn Pro Gln Asn
1 5 10 15

Ile Gln Ala Asn Leu Tyr Ser Val Ser Phe Ser His Pro His Thr Cys
20 25 30

Ser Pro Ile Ser Lys Met Lys Asn Ser Leu Pro Lys Cys Ile Gln Pro
35 40 45

Pro Thr Met Met Leu Leu Ile Gly Ile Trp Ile Asn Phe Thr Lys Lys
50 55 60

Pro Met Asn Pro Ile Ile Ala Asn Pro Ile Ala Val Ala Met Ala Ile

65

70

123

75

80

Phe	Trp	Asn	Ser	Phe 85	Leu	Ser	Gly	Leu	Val 90	His	Leu	Leu	Thr	Ser 95	Arg
-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Met	Glu	Ser	Phe 100	Thr	Asn	Cys	Arg	Leu 105	Gly	Ser	Thr	Asn	Cys 110	Ile	Thr
-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----

<210> 315

<211> 110

<212> PRT

<213> homo sapiens

<400> 315

Asp 1	Glu	Lys	Leu	Ser 5	Ser	Lys	Met	Tyr	Ser 10	Ala	Thr	Asn	Asn	Asp 15	Val
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Ile	Asn	Arg	Asn 20	Met	Asp	Gln	Phe	His 25	Lys	Glu	Ala	Asn	Glu 30	Ser	His
-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----

Tyr	Ser	Lys 35	Ser	Tyr	Cys	Cys	Cys 40	His	Gly	Asn	Leu	Leu 45	Glu	Phe	Phe
-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----

Ser	Ile 50	Arg	Phe	Ser	Ala	Ser 55	Phe	Asn	Gln	Pro	Asn 60	Gly	Val	Leu	Tyr
-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----

Lys 65	Leu	Pro	Thr	Trp	Leu 70	Asn	Lys	Leu	His	Tyr 75	Leu	Ile	His	Asp	Cys 80
-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------

Leu	Pro	Asn	Arg	His 85	Leu	Lys	Cys	Gln	Gly 90	His	Val	Ala	Leu	Glu 95	Leu
-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Ala	Asp	Gly	Gly 100	Pro	Pro	Glu	Pro	Glu 105	Ser	Gly	Phe	Leu	Pro 110
-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----	-----	-----	------------

<210> 316

<211> 113

<212> PRT

<213> homo sapiens

<400> 316

Gly 1	Ser	Ser	Glu	Gly 5	Ser	Tyr	Ser	Ser	Gln 10	Thr	Glu	Thr	Cys	Pro 15	Leu
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Thr	Pro	Ser	Leu 20	Val	Thr	Gly	Ser	Met 25	Phe	Ala	Gln	Asn	Phe 30	Leu	Arg
-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----

Gly	Leu	Ser 35	Leu	Gln	Lys	Ser	Asn 40	Leu	Leu	Pro	Glu	Cys 45	Cys	Leu	Ala
-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----

Ser	Glu 50	Asn	Leu	Thr	Leu	Ser 55	Phe	Pro	Ser	Val	Asn 60	Gly	His	Arg	Cys
-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----

Val 65	Ala	Gln	Gly	Ser	Glu 70	Thr	Ser	Glu	Ser	Arg 75	Ala	Gln	Trp	His	Gly 80
-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------

Val	Ala	Leu	Val	Val 85	Arg	Lys	Val	Ile	Gly 90	Gln	Leu	Tyr	Cys	Lys 95	Arg
-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Asn	Lys	Tyr	Val 100	Val	Gln	Phe	Cys	Lys 105	Cys	Gln	Val	Cys	Ser 110	Val	Val
-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----

Leu

<210> 317

<211> 100

<212> PRT

<213> homo sapiens

<400> 317

Gly 1	Lys	Arg	Gly	Gln 5	Leu	Trp	Ser	Leu	Asn 10	Leu	Leu	Ala	Pro	Cys 15	Ala
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Gly	Tyr	Lys	Thr 20	Arg	Ser	Trp	Ser	Lys 25	Ile	Ala	Leu	Thr	Pro 30	Asn	Pro
-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----

Asn	Ala	Val 35	Gln	Asp	Leu	Gly	Ala 40	Thr	Gln	Pro	Val	Val 45	Ile	Trp	Cys
-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----

Trp	Phe 50	Pro	Phe	Phe	Val	Cys 55	Leu	Leu	Val	Ser	Lys 60	Ile	Ala	Leu	Leu
-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----

Gly 65	Thr	Ala	Trp	Lys	Val 70	Gln	Ala	Phe	Leu	Leu 75	Ala	Arg	Ser	Gly	Leu 80
-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------

Ala	Ser	Ser	Pro	Cys 85	Leu	His	Ser	Val	Pro 90	Lys	Glu	Asp	Phe	Cys 95	Ser
-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Thr	Leu	Trp	Ser 100
-----	-----	-----	------------

<210> 318

<211> 101

<212> PRT

<213> homo sapiens

<400> 318

Ser 1	Gln	Ile	Ile	Ser 5	Asn	Leu	Val	Asp	Asn 10	Tyr	Ser	Ile	Gln	Glu 15	Leu
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Met	Phe	Ser	Glu 20	Thr	Val	Ile	Asn	Arg 25	Ile	Phe	Thr	Ser	Gly 30	Leu	Ala
-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----

Gly	Arg	Leu 35	Gly	Gly	Arg	Lys	Gly 40	Arg	Val	Glu	Gly	Trp 45	Val	Ala	His
-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----

Gln	Asn 50	Gly	Asp	Glu	Pro	Gly 55	Lys	Thr	Thr	Met	Leu 60	Leu	Phe	Leu	Tyr
Pro 65	Leu	Lys	Pro	Ile	Ser 70	Arg	Val	Leu	Asn	Asp 75	Ala	Phe	Phe	Val	Cys 80
Phe	Leu	Ile	Gly	Ser 85	Gln	Ile	Ser	Phe	Ser 90	Ile	Lys	Asn	Trp	Gly 95	Tyr
Lys	Pro	Lys	Glu 100	Thr											

<210> 319
 <211> 368
 <212> PRT
 <213> homo sapiens
 <400> 319

Trp 1	Trp	Arg	Leu	Asn 5	Asn	Lys	Ser	Ala	Lys 10	Val	Arg	Gln	Gln	Ala 15	Ala
Asp	Leu	Ile	Ser 20	Arg	Thr	Ala	Val	Val 25	Met	Lys	Thr	Cys	Gln 30	Glu	Glu
Lys	Leu	Met 35	Gly	His	Leu	Gly	Val 40	Val	Leu	Tyr	Glu	Tyr 45	Leu	Gly	Glu
Glu	Tyr 50	Pro	Glu	Val	Leu	Gly 55	Ser	Ile	Leu	Gly	Ala 60	Leu	Lys	Ala	Ile
Val 65	Asn	Val	Ile	Gly	Met 70	His	Lys	Met	Thr	Pro 75	Pro	Ile	Lys	Asp	Leu 80
Leu	Pro	Arg	Leu	Thr 85	Pro	Ile	Leu	Lys	Asn 90	Arg	His	Glu	Lys	Val 95	Gln
Glu	Asn	Cys	Ile 100	Asp	Leu	Val	Gly	Arg 105	Ile	Ala	Asp	Arg	Gly 110	Ala	Glu
Tyr	Val	Ser 115	Ala	Arg	Glu	Trp	Met 120	Arg	Ile	Cys	Phe	Glu 125	Leu	Leu	Glu
Leu	Leu 130	Lys	Ala	His	Lys	Lys 135	Ala	Ile	Arg	Arg	Ala 140	Thr	Val	Asn	Thr
Phe 145	Gly	Tyr	Ile	Ala	Lys 150	Ala	Ile	Gly	Pro	His 155	Asp	Val	Leu	Ala	Thr 160
Leu	Leu	Asn	Asn	Leu 165	Lys	Val	Gln	Glu	Arg 170	Gln	Asn	Arg	Val	Cys 175	Thr

Thr	Val	Ala	Ile 180	Ala	Ile	Val	Ala	Glu 185	Thr	Cys	Ser	Pro	Phe 190	Thr	Val
Leu	Pro	Ala 195	Leu	Met	Asn	Glu	Tyr 200	Arg	Val	Pro	Glu	Leu 205	Asn	Val	Gln
Asn	Gly 210	Val	Leu	Lys	Ser	Leu 215	Ser	Phe	Leu	Phe	Glu 220	Tyr	Ile	Gly	Glu
Met 225	Gly	Lys	Asp	Tyr	Ile 230	Tyr	Ala	Val	Thr	Pro 235	Leu	Leu	Glu	Asp	Ala 240
Leu	Met	Asp	Arg	Asp 245	Leu	Val	His	Arg	Gln 250	Thr	Ala	Ser	Ala	Val 255	Val
Gln	His	Met	Ser 260	Leu	Gly	Val	Tyr	Gly 265	Phe	Gly	Cys	Glu	Asp 270	Ser	Leu
Asn	His	Leu 275	Leu	Asn	Tyr	Val	Trp 280	Pro	Asn	Val	Phe	Glu 285	Thr	Ser	Pro
His	Val 290	Ile	Gln	Ala	Val	Met 295	Gly	Ala	Leu	Glu	Gly 300	Leu	Arg	Val	Ala
Ile 305	Gly	Pro	Cys	Arg	Met 310	Leu	Gln	Tyr	Cys	Leu 315	Gln	Gly	Leu	Phe	His 320
Pro	Ala	Arg	Lys 325	Val	Arg	Asp	Val	Tyr	Trp 330	Lys	Ile	Tyr	Asn	Ser 335	Ile
Tyr	Ile	Gly	Ser 340	Gln	Asp	Ala	Leu	Ile 345	Ala	His	Tyr	Pro	Arg 350	Ile	Tyr
Asn	Asp	Asp 355	Lys	Asn	His	Leu	Ile 360	Ile	Arg	Leu	Met	Asn 365	Leu	Gly	Leu

<210> 320
 <211> 121
 <212> PRT
 <213> homo sapiens

<400> 320

Tyr 1	Pro	Phe	Phe	Thr 5	Leu	Cys	Gln	Arg	Asn 10	Arg	Val	Phe	Asp	Ile 15	Ser
Ser	Tyr	Val	Lys 20	Glu	Met	Leu	Gln	Asn 25	Val	Asn	Cys	Phe	Lys 30	Leu	Lys
Leu	Pro	Leu 35	Lys	Arg	Pro	Arg	Tyr 40	Ile	Tyr	Leu	Ile	Val 45	Tyr	Ile	Met

Phe	Asn	Ile	Cys	Gln	Ser	Ile	Leu	Gln	Val	Cys	Ser	Phe	Ile	Ser	Ile
	50					55					60				
Lys	Tyr	Gly	Tyr	Tyr	Val	Ala	Gln	Leu	Leu	Lys	Trp	Tyr	Cys	Ile	Val
65					70					75					80
Tyr	Ile	Cys	Thr	Pro	Asn	Asn	Ile	Val	Cys	Thr	Phe	Cys	Phe	Leu	Tyr
				85					90					95	
Cys	Ile	Cys	Ala	Gly	Phe	Phe	Arg	Leu	Tyr	Gln	Cys	Asn	Leu	Cys	Leu
			100					105					110		
Leu	Arg	Tyr	Val	Gln	Lys	Met	Ser	Ile							
		115					120								

<210> 321
 <211> 114
 <212> PRT
 <213> homo sapiens

<400> 321

Phe	Phe	Phe	Phe	Phe	Phe	Phe	Phe	Phe	Phe	His	Ser	Asn	Val	Tyr	Phe
1				5					10					15	
Phe	Phe	Phe	Phe	Phe	Phe	Phe	Phe	Phe	Gly	Lys	Asn	Val	Ile	Tyr	Leu
			20					25					30		
His	Cys	Phe	His	Ser	Ser	Thr	Val	Val	Leu	Gly	Leu	Asn	Ile	Ser	Ile
		35					40					45			
Thr	Leu	Leu	Phe	Pro	Ile	Tyr	Ile	Leu	Leu	Glu	Tyr	Tyr	Tyr	Lys	Tyr
	50					55					60				
Asn	Ile	Gln	Phe	Lys	Lys	Thr	Tyr	Gly	Glu	Thr	Gln	Leu	Met	Phe	Phe
65					70					75					80
Ser	Pro	Leu	Tyr	Arg	Leu	Leu	Ser	Ile	Ile	Arg	Leu	Gln	Trp	Lys	Phe
				85					90					95	
Ile	Trp	Thr	Phe	Ser	Val	His	Ile	Leu	Lys	Gly	Arg	Asp	Tyr	Thr	Asp
			100					105					110		

Lys Ala

<210> 322
 <211> 597
 <212> PRT
 <213> homo sapiens

<400> 322

Glu	Lys	Cys	Gly	Gln	Tyr	Ile	Gln	Lys	Gly	Tyr	Ser	Lys	Leu	Lys	Ile
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

1			5			128			10			15			
Tyr	Asn	Cys	Glu 20	Leu	Glu	Asn	Val	Ala 25	Glu	Phe	Glu	Gly	Leu 30	Thr	Asp
Phe	Ser	Asp 35	Thr	Phe	Lys	Leu	Tyr 40	Arg	Gly	Lys	Ser	Asp 45	Glu	Asn	Glu
Asp	Pro 50	Ser	Val	Val	Gly	Glu 55	Phe	Lys	Gly	Ser	Phe 60	Arg	Ile	Tyr	Pro
Leu 65	Pro	Asp	Asp	Pro	Ser 70	Val	Pro	Ala	Pro	Pro 75	Arg	Gln	Phe	Arg	Glu 80
Leu	Pro	Asp	Ser	Val 85	Pro	Gln	Glu	Cys	Thr 90	Val	Arg	Ile	Tyr	Ile 95	Val
Arg	Gly	Leu	Glu 100	Leu	Gln	Pro	Gln	Asp 105	Asn	Asn	Gly	Leu	Cys 110	Asp	Pro
Tyr	Ile	Lys 115	Ile	Thr	Leu	Gly	Lys 120	Lys	Val	Ile	Glu	Asp 125	Arg	Asp	His
Tyr	Ile 130	Pro	Asn	Thr	Leu	Asn 135	Pro	Val	Phe	Gly	Arg 140	Met	Tyr	Glu	Leu
Ser 145	Cys	Tyr	Leu	Pro	Gln 150	Glu	Lys	Asp	Leu	Lys 155	Ile	Ser	Val	Tyr	Asp 160
Tyr	Asp	Thr	Phe	Thr 165	Arg	Asp	Glu	Lys	Val 170	Gly	Glu	Thr	Ile	Ile 175	Asp
Leu	Glu	Asn	Arg 180	Phe	Leu	Ser	Arg	Phe 185	Gly	Ser	His	Cys	Gly 190	Ile	Pro
Glu	Glu	Tyr 195	Cys	Val	Ser	Gly	Val 200	Asn	Thr	Trp	Arg	Asp 205	Gln	Leu	Arg
Pro	Thr 210	Gln	Leu	Leu	Gln	Asn 215	Val	Ala	Arg	Phe	Lys 220	Gly	Phe	Pro	Gln
Pro 225	Ile	Leu	Ser	Glu	Asp 230	Gly	Ser	Arg	Ile	Arg 235	Tyr	Gly	Gly	Arg	Asp 240
Tyr	Ser	Leu	Asp	Glu 245	Phe	Glu	Ala	Asn	Lys 250	Ile	Leu	His	Gln	His 255	Leu
Gly	Ala	Pro	Glu 260	Glu	Arg	Leu	Ala	Leu 265	His	Ile	Leu	Arg	Thr 270	Gln	Gly

Leu	Val	Pro 275	Glu	His	Val	Glu	Thr 280	Arg	Thr	Leu	His	Ser 285	Thr	Phe	Gln
Pro	Asn 290	Ile	Ser	Gln	Gly	Lys 295	Leu	Gln	Met	Trp	Val 300	Asp	Val	Phe	Pro
Lys 305	Ser	Leu	Gly	Pro	Pro 310	Gly	Pro	Pro	Phe	Asn 315	Ile	Thr	Pro	Arg	Lys 320
Ala	Lys	Lys	Tyr	Tyr 325	Leu	Arg	Val	Ile	Ile 330	Trp	Asn	Thr	Lys	Asp 335	Val
Ile	Leu	Asp	Glu 340	Lys	Ser	Ile	Thr	Gly 345	Glu	Glu	Met	Ser	Asp 350	Ile	Tyr
Val	Lys	Gly 355	Trp	Ile	Pro	Gly	Asn 360	Glu	Glu	Asn	Lys	Gln 365	Lys	Thr	Asp
Val	His 370	Tyr	Arg	Ser	Leu	Asp 375	Gly	Glu	Gly	Asn	Phe 380	Asn	Trp	Arg	Phe
Val 385	Phe	Pro	Phe	Asp	Tyr 390	Leu	Pro	Ala	Glu	Gln 395	Leu	Cys	Ile	Val	Ala 400
Lys	Lys	Glu	His	Phe 405	Trp	Ser	Ile	Asp	Gln 410	Thr	Glu	Phe	Arg	Ile 415	Pro
Pro	Arg	Leu	Ile 420	Ile	Gln	Ile	Trp	Asp 425	Asn	Asp	Lys	Phe	Ser 430	Leu	Asp
Asp	Tyr	Leu 435	Gly	Phe	Leu	Glu	Leu 440	Asp	Leu	Arg	His	Thr 445	Ile	Ile	Pro
Ala	Lys 450	Ser	Pro	Glu	Lys	Cys 455	Arg	Leu	Asp	Met	Ile 460	Pro	Asp	Leu	Lys
Ala 465	Met	Asn	Pro	Leu	Lys 470	Ala	Lys	Thr	Ala	Ser 475	Leu	Phe	Glu	Gln	Lys 480
Ser	Met	Lys	Gly	Trp 485	Trp	Pro	Cys	Tyr	Ala 490	Glu	Lys	Asp	Gly	Ala 495	Arg
Val	Met	Ala	Gly 500	Lys	Val	Glu	Met	Thr 505	Leu	Glu	Ile	Leu	Asn 510	Glu	Lys
Glu	Ala	Asp 515	Glu	Arg	Pro	Ala	Gly 520	Lys	Gly	Arg	Asp	Glu 525	Pro	Asn	Met

130

Asn	Pro	Lys	Leu	Asp	Leu	Pro	Asn	Arg	Pro	Glu	Thr	Ser	Phe	Leu	Trp
	530					535					540				
Phe	Thr	Asn	Pro	Cys	Lys	Thr	Met	Lys	Phe	Ile	Val	Trp	Arg	Arg	Phe
545					550					555					560
Lys	Trp	Val	Ile	Ile	Gly	Leu	Leu	Phe	Leu	Leu	Ile	Leu	Leu	Leu	Phe
				565					570					575	
Val	Ala	Val	Leu	Leu	Tyr	Ser	Leu	Pro	Asn	Tyr	Leu	Ser	Met	Lys	Ile
			580					585					590		
Val	Lys	Pro	Asn	Val											
		595													

<210> 323
 <211> 76
 <212> PRT
 <213> homo sapiens

<400> 323

Ile	Arg	Arg	Asp	Lys	Ala	Tyr	Leu	Thr	Phe	Lys	Trp	Arg	Asp	Asp	Glu
1				5					10					15	
Asn	Pro	Leu	Ile	Gln	Ser	Phe	Arg	Thr	Lys	Arg	Gln	Ser	Ser	Asp	Lys
			20					25					30		
Ser	Met	Thr	Trp	Met	Lys	Cys	Pro	Thr	Gly	Ala	Leu	Asp	Ile	Phe	Asn
		35					40					45			
Phe	Cys	Asp	Tyr	Val	Lys	Glu	Val	Asp	Phe	Thr	Asp	Asn	Gly	Ala	Glu
	50					55					60				
Ala	Asn	Ile	Ser	Lys	Arg	Asn	Pro	Asn	Phe	Phe	Pro				
65					70					75					

<210> 324
 <211> 90
 <212> PRT
 <213> homo sapiens

<400> 324

Phe	Phe	Leu	Tyr	Ser	Phe	Ser	Ser	Asp	Asn	His	Asp	Phe	Arg	Ser	Phe
1				5					10					15	
Lys	Thr	Ile	Tyr	Leu	Ala	Phe	Val	Ser	Gly	Gly	Glu	Leu	Ala	Ile	Ser
			20					25					30		
Leu	Leu	Lys	Pro	Ala	Ile	Ile	Val	Asn	Leu	Arg	Thr	Gly	Leu	Ser	Trp
		35					40					45			
Gly	Ser	Glu	Gly	Lys	Glu	Leu	Phe	Glu	Gln	Met	Cys	Val	Gly	Gly	Thr
	50					55					60				

Gly	Phe	His	Pro	Thr	Ala	Lys	Leu	Val	Leu	Leu	Glu	Ile	Ser	Phe	Tyr
65					70					75					80

Asn	Thr	Lys	Ile	Ser	Leu	Cys	Gln	Arg	Phe
				85					90

<210> 325
 <211> 60
 <212> PRT
 <213> homo sapiens

<400> 325

Thr	Arg	Ser	Leu	Leu	Tyr	Phe	His	Met	Phe	Leu	Ile	Leu	Trp	Glu	Glu
1				5					10					15	

Val	Gly	Ile	Pro	Phe	Thr	Asn	Val	Gly	Phe	Cys	Ser	Ile	Ile	Cys	Lys
			20					25					30		

Val	His	Leu	Phe	His	Ile	Ile	Ala	Glu	Ile	Lys	Asp	Val	Gln	Gly	Pro
		35					40					45			

Cys	Arg	Ala	Phe	His	Pro	Cys	His	Thr	Leu	Ile	Arg
	50					55					60

<210> 326
 <211> 42
 <212> PRT
 <213> homo sapiens

<400> 326

Ile	Arg	Asn	Glu	Lys	Lys	Gly	Cys	Val	Leu	Ser	Val	Gly	Glu	Met	Glu
1				5					10					15	

Leu	Val	Leu	Val	Val	Leu	Glu	Gln	Asp	Arg	His	Leu	Val	Leu	Met	Leu
			20					25					30		

Trp	Ser	Phe	Val	Ile	Val	Glu	His	Arg	Gly
		35					40		

<210> 327
 <211> 50
 <212> PRT
 <213> homo sapiens

<400> 327

Ala	Thr	Cys	Ser	Asp	Asn	Arg	Ser	Lys	Ile	Phe	Gln	Leu	Phe	Asn	Leu
1				5					10					15	

Glu	Cys	Tyr	Val	Leu	Leu	Glu	Pro	Ala	Ile	Cys	Met	Tyr	Arg	Ile	Asn
			20					25					30		

Asn	Phe	Tyr	Ser	Phe	Gly	Gln	Val	Ile	Leu	Arg	Gln	Ser	Gln	Trp	Ile
		35					40					45			

Gln Lys

50

<210> 328
 <211> 48
 <212> PRT
 <213> homo sapiens

<400> 328

Pro	Lys	Gly	Val	Val	Val	Asn	Pro	Gly	Ala	Leu	Leu	Ser	Gln	Arg	Thr
1				5					10					15	
Thr	Ala	Ser	Glu	Leu	Ser	Ala	Cys	Pro	Ala	Pro	Thr	Leu	Pro	Gly	Pro
			20					25					30		
Val	Pro	Ser	His	Leu	Leu	Ile	Arg	His	Ser	Leu	Ser	Ser	His	Ser	Leu
		35					40					45			

<210> 329
 <211> 100
 <212> PRT
 <213> homo sapiens

<400> 329

Ile	Ser	Glu	Val	Ala	Val	Asn	Phe	Ser	Val	Leu	Leu	Leu	Ala	Ser	Val
1				5					10					15	
Cys	Leu	Pro	Ile	Asp	Thr	His	Tyr	Thr	Asn	Val	Pro	Ser	Lys	Cys	Ser
			20					25					30		
Leu	His	Ile	Cys	Phe	His	Cys	Val	Pro	Thr	Gly	Ala	Met	Lys	Cys	Val
		35					40					45			
Arg	Ser	Pro	Ser	Ser	Gly	Gly	Met	Ser	Ala	Ala	Leu	Thr	Thr	Ala	Ile
	50					55					60				
Arg	Ile	Val	Leu	Cys	Gly	Ile	Phe	Ile	Tyr	Ile	Asn	Phe	Ile	Cys	Thr
65					70					75					80
Val	Ile	Ser	Leu	Phe	Ile	Cys	Gln	Val	Thr	Ile	Cys	Lys	Ser	Tyr	Thr
				85					90					95	
His	Lys	Leu	Leu												
			100												

<210> 330
 <211> 122
 <212> PRT
 <213> homo sapiens

<400> 330

Glu	Ala	Gln	Lys	Trp	Asp	Cys	Ile	Trp	Thr	Lys	Asn	Tyr	Lys	Lys	Val
1				5					10					15	
Gln	Ser	Leu	Val	Ser	Arg	Met	Gln	Ala	Leu	Ala	Leu	Gly	Asp	Gly	Ser
			20					25					30		

Ser	Leu	Glu 35	Asn	Ala	Ala	Ala	Asp 40	Ser	Leu	Phe	Gln	Arg 45	Arg	Ser	Phe	
Glu	Arg 50	Arg	Val	Cys	Tyr	Ile 55	Ser	Phe	Phe	Thr	Val 60	Thr	Leu	Trp	Arg	
Leu 65	Lys	Asp	Leu	Val	Val 70	Ser	Cys	Phe	Leu	Lys 75	Ile	Thr	Gly	Ile	Trp 80	
Arg	Pro	Val	Lys	Pro 85	Phe	Trp	Thr	Asp	Ile 90	Ser	Ser	Lys	Tyr	Phe 95	Phe	
Ile	Lys	Val	Phe 100	Glu	Gly	Asp	Asp	Phe 105	Leu	Asp	Leu	Trp	Leu 110	Asp	Ile	
Leu	Gly	Phe 115	Pro	Asp	Tyr	Ile	Val 120	Leu	Ser							

<210> 331
 <211> 124
 <212> PRT
 <213> homo sapiens

<400> 331

Glu 1	Asn	Trp	Ala	Ser 5	Arg	Tyr	Phe	Gln	Ser 10	Ser	Phe	Thr	Glu	Gln 15	Lys	
Val	Trp	Val	Gly 20	His	Trp	Leu	Glu	Gly 25	Asp	Ser	Pro	Thr	Leu 30	Thr	Val	
Thr	Ile	Trp 35	Ala	Ala	Thr	Gly	Gly 40	Ile	Val	Gln	Leu	Ala 45	Ser	Arg	Cys	
Ile	Pro 50	His	Leu	Lys	Tyr	Cys 55	Trp	Ile	Lys	Ala	Ile 60	Tyr	Thr	Leu	Ala	
Lys 65	Ser	Lys	Ala	Lys	Glu 70	Ile	Ala	Leu	Asp	Pro 75	Glu	Ser	Gln	Gln	Asp 80	
His	Leu	Ile	Phe	Pro 85	Asn	Gln	His	Leu	Gly 90	Gln	Gln	Leu	Pro	Ser 95	Thr	
Phe	Leu	Phe	His 100	Ser	Trp	Phe	Phe	Phe 105	Phe	Phe	Phe	Leu	Gln 110	Asp	Leu	
Ala	Val	Thr 115	Gln	Asp	Gly	Val	Gln 120	Trp	His	Asp	His					

<210> 332
 <211> 82
 <212> PRT

<213> homo sapiens

<400> 332

Leu 1	Asn	Val	Asp	Leu 5	Leu	Ile	Thr	Arg	Arg 10	Leu	Cys	Glu	Lys	Ile 15	Tyr
Val	Tyr	Ile	Tyr 20	Met	Ile	Cys	Arg	Ser 25	His	Phe	Phe	Tyr	Gln 30	Ala	Leu
Phe	Ser	Leu 35	Gln	Ser	His	Ser	Leu 40	Thr	Val	Cys	Asn	Ser 45	Trp	Phe	Met
Leu	Met 50	Ile	Asp	Lys	Tyr	Pro 55	Val	Phe	Val	Thr	Phe 60	Ser	Asn	Tyr	His
Cys 65	Asn	Asp	Asn	Leu	Ser 70	His	Val	Tyr	Thr	Cys 75	Asn	Phe	Leu	Ala	Ser 80

Phe Pro

<210> 333

<211> 82

<212> PRT

<213> homo sapiens

<400> 333

Arg 1	Leu	Val	Lys	Tyr 5	Lys	Asn	Ser	Leu	Asn 10	Arg	Glu	Lys	Ala	Ser 15	Gln
Val	Phe	Pro	Leu 20	Lys	Val	Lys	Tyr	Gly 25	Thr	Phe	His	Phe	Asn 30	Lys	Val
Asn	Asp	Phe 35	Lys	Asn	Leu	Thr	Phe 40	Phe	Arg	Arg	Lys	Lys 45	Lys	Thr	Ser
Tyr	Glu 50	Pro	Ser	Leu	Val	Asn 55	His	Leu	Val	Tyr	Lys 60	Ile	Phe	Pro	Leu
Phe 65	Lys	Lys	Cys	Phe	Cys 70	Lys	Ile	Leu	Arg	Ser 75	His	Glu	Ile	Met	Pro 80

Trp Ser

<210> 334

<211> 75

<212> PRT

<213> homo sapiens

<400> 334

Lys 1	Leu	Glu	Tyr	Ile 5	Met	Ser	Thr	Ala	Asn 10	Cys	Ser	Phe	Cys	Leu 15	Ile
Leu	Thr	Asp	Tyr 20	Ala	Phe	Pro	Gln	Arg 25	Ser	Ser	Arg	Ser	His 30	Ile	Tyr

Arg	His	Ile 35	Tyr	Gly	Ser	Gly	Leu 40	Lys	Glu	Lys	Thr	Ile 45	Leu	Ser	Ser
-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----

Ile	Met 50	Ile	Tyr	His	Cys	Ala 55	Ile	Asn	Gln	Lys	Asn 60	Gln	Val	Arg	Asn
-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----

Thr 65	Ile	Lys	Thr	Thr	Leu 70	Lys	Gly	Lys	Asn	Phe 75
-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------

<210> 335

<211> 72

<212> PRT

<213> homo sapiens

<400> 335

Asn 1	Glu	Tyr	Cys	Ser 5	Trp	Ser	Thr	Cys	Ile 10	Lys	Gln	Lys	Thr	Cys 15	Gln
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Leu	Leu	Gly	Ala 20	Asn	Thr	Gln	Asn	Leu 25	Val	Pro	Val	Phe	Phe 30	Phe	Phe
-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----

Leu	Thr	Thr 35	Ile	Val	Tyr	Thr	Phe 40	Leu	Lys	Ile	Lys	Phe 45	Val	Thr	Lys
-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----

Ser	Pro 50	Met	Ser	Phe	Thr	Cys 55	Ile	Tyr	Asp	His	Gln 60	Met	Val	Ile	Arg
-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----

Ala 65	Thr	Tyr	Val	Asn	Ala 70	Cys	Leu
-----------	-----	-----	-----	-----	-----------	-----	-----

<210> 336

<211> 93

<212> PRT

<213> homo sapiens

<400> 336

Thr 1	His	Asn	Thr	Ser 5	Thr	Ile	Thr	Ala	Tyr 10	Arg	Lys	Leu	Gln	Ser 15	Thr
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Leu	Gln	Ala	Ser 20	Lys	Val	His	Ser	Val 25	Ala	Gln	Ser	Pro	Trp 30	Arg	Gly
-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----

Arg	Asp	Leu 35	Lys	Val	Leu	Met	Ser 40	Ser	Tyr	Phe	Thr	Cys 45	Phe	Leu	Leu
-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----

Ser	Thr 50	Gln	Cys	Lys	Met	Asn 55	Phe	Leu	His	Ser	Leu 60	Tyr	Phe	Arg	Leu
-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----

Lys 65	Ile	Asp	Ser	Phe	Leu 70	Val	Leu	Thr	Leu	Thr 75	Leu	Glu	Gly	Thr	Val 80
-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------

Val	Pro	Gly	Lys	Arg	Ser	Arg	Phe	Thr	Val	Pro	Asn	His
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

85

136

90

<210> 337
 <211> 99
 <212> PRT
 <213> homo sapiens

<400> 337

Leu 1	Gly	Pro	Arg	Gly 5	Glu	Ile	Glu	Val	Tyr 10	Leu	Ala	Lys	Ser	Leu 15	Ala
Glu	Lys	Leu	Tyr 20	Leu	Cys	Gln	Tyr	Pro 25	Val	Arg	Pro	Ala	Ser 30	Met	Thr
Tyr	Asp	Asp 35	Ile	Pro	His	Leu	Ser 40	Ala	Lys	Ile	Lys	Pro 45	Lys	Gln	Gln
Lys	Val 50	Glu	Leu	Glu	Met	Ala 55	Ile	Asp	Thr	Leu	Asn 60	Pro	Asn	Tyr	Cys
Arg 65	Ser	Lys	Gly	Glu	Gln 70	Ile	Ala	Leu	Asn	Val 75	Asp	Gly	Ala	Cys	Ala 80
Asp	Glu	Thr	Ser	Thr 85	Tyr	Ser	Ser	Lys	Leu 90	Met	Asp	Lys	Gln	Thr 95	Phe
Cys	Ser	Ser													

<210> 338
 <211> 56
 <212> PRT
 <213> homo sapiens

<400> 338

Gly 1	Lys	Ser	Arg	Arg 5	Ser	Ala	Cys	Pro	Ser 10	Ala	Ser	Arg	Asn	Thr 15	Cys
Trp	Ser	Arg	Arg 20	Arg	Arg	Pro	Arg	Pro 25	Arg	Ser	Ala	Gln	Ser 30	Ala	Pro
Leu	Cys	Cys 35	Gly	Asn	Ser	Trp	Gly 40	Ser	Gly	Cys	Arg	Trp 45	Pro	Ser	Gln
Ala	Leu 50	Pro	Ser	Ala	Ala	Trp 55	Ala								

<210> 339
 <211> 59
 <212> PRT
 <213> homo sapiens

<400> 339

Gly 1	Arg	Ala	Glu	Gly 5	Leu	Leu	Val	His	Gln 10	Leu	Arg	Gly	Ile	Arg 15	Ala
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Gly	Leu	Val	Gly 20	Ala	Gly	Pro	Val 137	His 25	Val	Gln	Arg	Asn	Leu 30	Leu	Pro
Phe	Ala	Ala 35	Ala	Ile	Val	Gly	Val 40	Gln	Gly	Val	Asp	Gly 45	His	Leu	Lys
Leu	Tyr 50	Leu	Leu	Leu	Leu	Gly 55	Leu	Asp	Leu	Gly					

<210> 340
 <211> 157
 <212> PRT
 <213> homo sapiens

<400> 340

Gln 1	Pro	Ser	Ser	Leu 5	Leu	His	His	Cys	Pro 10	Tyr	Pro	Tyr	Pro	Pro 15	Arg
His	Leu	Leu	Ala 20	Thr	Pro	Leu	Leu	Lys 25	Pro	Gln	Leu	Leu	Ala 30	Gly	Ser
Pro	Ala	His 35	Ala	Ser	Leu	Ile	Ser 40	Phe	Leu	Ala	Ser	Pro 45	Gln	Arg	Ala
Ser	Arg 50	Gln	His	Gly	Gly	Pro 55	Ser	Gln	Arg	Ala	Gly 60	Thr	Leu	Ser	Cys
Pro 65	Leu	Val	Glu	Leu	Gly 70	Gly	Ser	Ser	Gly	Gly 75	Arg	Gly	Leu	Cys	His 80
Gly	Ser	Ala	Asp	Pro 85	Thr	Asn	Arg	Ala	Ala 90	Glu	Pro	Gln	Glu	Arg 95	Gly
Glu	Pro	Ala	Ala 100	Gly	Asp	Arg	Arg	Pro 105	Leu	Pro	Glu	Trp	Gly 110	Arg	Val
Ser	Leu	Ala 115	Glu	Ser	Pro	Gly	Ala 120	Glu	Phe	Arg	Cys	Pro 125	Gly	Ser	Leu
Gly	Glu 130	Trp	Gly	Glu	Ile	Pro 135	Glu	Lys	Glu	Ser	Ser 140	Ala	His	Pro	Lys
Thr 145	Glu	Glu	Ala	Ala	Leu 150	Cys	Pro	Ala	Pro	Gly 155	Ser	His			

<210> 341
 <211> 260
 <212> PRT
 <213> homo sapiens

<400> 341

Asn 1	His	Ser	Cys	Trp 5	Gln	Gly	Pro	Gln	Leu 10	Met	Pro	Ala	Ser	Ser 15	Pro
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Phe	Leu	Leu	Ala 20	Pro	Lys	Gly	Pro	Pro 25	Gly	Asn	Met	Gly	Gly 30	Pro	Val
Arg	Glu	Pro 35	Ala	Leu	Ser	Val	Ala 40	Leu	Trp	Leu	Ser	Trp 45	Gly	Ala	Ala
Leu	Gly 50	Ala	Val	Ala	Cys	Ala 55	Met	Ala	Leu	Leu	Thr 60	Gln	Gln	Thr	Glu
Leu 65	Gln	Ser	Leu	Arg	Arg 70	Glu	Val	Ser	Arg	Leu 75	Gln	Gly	Thr	Gly	Gly 80
Pro	Ser	Gln	Asn	Gly 85	Glu	Gly	Tyr	Pro	Trp 90	Gln	Ser	Leu	Pro	Glu 95	Gln
Ser	Ser	Asp	Ala 100	Leu	Glu	Ala	Trp	Glu 105	Ser	Gly	Glu	Arg	Ser 110	Arg	Lys
Arg	Arg	Ala 115	Val	Leu	Thr	Gln	Lys 120	Gln	Lys	Lys	Gln	His 125	Ser	Val	Leu
His	Leu 130	Val	Pro	Ile	Asn	Ala 135	Thr	Ser	Lys	Asp	Asp 140	Ser	Asp	Val	Thr
Glu 145	Val	Met	Trp	Gln	Pro 150	Ala	Leu	Arg	Arg	Gly 155	Arg	Gly	Leu	Gln	Ala 160
Gln	Gly	Tyr	Gly	Val 165	Arg	Ile	Gln	Asp	Ala 170	Gly	Val	Tyr	Leu	Leu 175	Tyr
Ser	Gln	Val	Leu 180	Phe	Gln	Asp	Val	Thr 185	Phe	Thr	Met	Gly	Gln 190	Val	Val
Ser	Arg	Glu 195	Gly	Gln	Gly	Arg	Gln 200	Glu	Thr	Leu	Phe	Arg 205	Cys	Ile	Arg
Ser	Met 210	Pro	Ser	His	Pro	Asp 215	Arg	Ala	Tyr	Asn	Ser 220	Cys	Tyr	Ser	Ala
Gly 225	Val	Phe	His	Leu	His 230	Gln	Gly	Asp	Ile	Leu 235	Ser	Val	Ile	Ile	Pro 240
Arg	Ala	Arg	Ala	Lys 245	Leu	Asn	Leu	Ser	Pro 250	His	Gly	Thr	Phe	Leu 255	Gly
Phe	Val	Lys	Leu 260												

<211> 201
 <212> PRT
 <213> homo sapiens

<400> 342

Thr 1	Pro	Ala	Ser	Trp 5	Ile	Arg	Thr	Pro	Tyr 10	Pro	Trp	Ala	Cys	Arg 15	Pro	
Leu	Pro	Arg	Leu 20	Arg	Ala	Gly	Cys	His 25	Ile	Thr	Ser	Val	Thr 30	Ser	Glu	
Ser	Ser	Leu 35	Glu	Val	Ala	Leu	Met 40	Gly	Thr	Arg	Cys	Arg 45	Thr	Glu	Cys	
Cys	Phe 50	Phe	Cys	Phe	Trp	Val 55	Ser	Thr	Ala	Leu	Leu 60	Phe	Arg	Asp	Leu	
Ser 65	Pro	Leu	Ser	Gln	Ala 70	Ser	Arg	Ala	Ser	Glu 75	Leu	Cys	Ser	Gly	Arg 80	
Leu	Cys	Gln	Gly	Tyr 85	Pro	Ser	Pro	Phe	Trp 90	Glu	Gly	Pro	Pro	Val 95	Pro	
Cys	Ser	Arg	Leu 100	Thr	Ser	Leu	Leu	Arg 105	Leu	Cys	Ser	Ser	Val 110	Cys	Trp	
Val	Ser	Arg 115	Ala	Met	Ala	Gln	Ala 120	Thr	Ala	Pro	Arg	Ala 125	Ala	Pro	Gln	
Leu	Asn 130	Gln	Arg	Ala	Thr	Glu 135	Ser	Ala	Gly	Ser	Leu 140	Thr	Gly	Pro	Pro	
Met 145	Leu	Pro	Gly	Gly	Pro 150	Leu	Gly	Ala	Ser	Lys 155	Lys	Gly	Asp	Glu	Ala 160	
Gly	Met	Ser	Trp	Gly 165	Pro	Cys	Gln	Gln	Leu 170	Trp	Phe	Gln	Glu	Trp 175	Gly	
Ser	Lys	Glu	Val 180	Ala	Gly	Arg	Val	Arg 185	Val	Arg	Ala	Val	Val 190	Gln	Lys	
Gly	Arg	Arg 195	Leu	Leu	Arg	Lys	Glu 200	Lys								

<210> 343
 <211> 165
 <212> PRT
 <213> homo sapiens

<400> 343

Gly 1	Arg	Arg	Ser	Arg 5	Met	Glu	Ile	Pro	Val 10	Pro	Val	Gln	Pro	Ser 15	Trp	
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	--

140

Leu	Arg	Arg	Ala 20	Ser	Ala	Pro	Leu	Pro 25	Gly	Leu	Ser	Ala	Pro 30	Gly	Arg
Leu	Phe	Asp 35	Gln	Arg	Phe	Gly	Glu 40	Gly	Leu	Leu	Glu	Ala 45	Glu	Leu	Ala
Ala	Leu 50	Cys	Pro	Thr	Thr	Leu 55	Ala	Pro	Tyr	Tyr	Leu 60	Arg	Ala	Pro	Ser
Val 65	Ala	Leu	Pro	Val	Ala 70	Gln	Val	Pro	Thr	Asp 75	Pro	Gly	His	Phe	Ser 80
Val	Leu	Leu	Asp	Val 85	Lys	His	Phe	Ser	Pro 90	Glu	Glu	Ile	Ala	Val 95	Lys
Val	Val	Gly	Glu 100	His	Val	Glu	Val	His 105	Ala	Arg	His	Glu	Glu 110	Arg	Pro
Asp	Glu	His 115	Gly	Phe	Val	Ala	Arg 120	Glu	Phe	His	Arg	Arg 125	Tyr	Arg	Leu
Pro	Pro 130	Gly	Val	Asp	Pro	Ala 135	Ala	Val	Thr	Ser	Ala 140	Leu	Ser	Pro	Glu
Gly 145	Val	Leu	Ser	Ile	Gln 150	Ala	Ala	Pro	Ala	Ser 155	Ala	Gln	Ala	Pro	Pro 160
Pro	Ala	Ala	Ala	Lys 165											

<210> 344
 <211> 116
 <212> PRT
 <213> homo sapiens

<400> 344

Thr 1	Ala	Leu	Ala	Gln 5	Pro	Gln	Ala	Ser	Gln 10	Ala	Gln	Ser	Pro	His 15	Pro
Pro	Asn	Val	Leu 20	Asp	Cys	Thr	Asp	Leu 25	Pro	Leu	Gln	Thr	Ile 30	Gln	Ala
Trp	Phe	Pro 35	Arg	Pro	Asp	Pro	Ser 40	Pro	Ala	Thr	Arg	Gln 45	Ser	Thr	Thr
Ala	Pro 50	Ser	Ser	Pro	Phe	Ser 55	Ala	Val	Lys	Pro	Gln 60	Pro	Ala	Thr	Pro
Asp 65	Ser	Gly	Thr	Leu	Phe 70	Arg	Leu	Pro	Gln	Leu 75	Leu	Asp	Thr	Arg	Pro 80

Thr Arg Thr Pro Asn Thr Lys Leu Tyr Arg Leu Ser His Pro Asn Leu
85 90 95

Pro Arg Leu Cys Thr Asp Val Leu Gly Pro Leu Pro Asn Ser Asn Gln
100 105 110

Thr Pro Ser Pro
115

<210> 345
<211> 111
<212> PRT
<213> homo sapiens

<400> 345

Asp Ile Arg Ala Glu Ser Gly Glu Val Gly Val Gly Glu Ser Val Gln
1 5 10 15

Phe Gly Val Gly Cys Ser Ser Trp Pro Gly Val Gln Glu Leu Gly Gln
20 25 30

Ser Lys Lys Gly Ser Arg Val Trp Cys Gly Trp Leu Gly Phe His Gly
35 40 45

Arg Lys Trp Ala Gly Gly Gly Ser Cys Arg Leu Ser Gly Cys Arg Gly
50 55 60

Arg Ile Gly Ser Trp Glu Pro Gly Leu Asp Gly Leu Glu Trp Glu Val
65 70 75 80

Cys Ala Val Gln Asp Val Trp Gly Val Gly Gly Leu Cys Leu Thr Gly
85 90 95

Leu Gly Leu Gly Gln Gly Cys Leu His His Asn Leu Val Ser Lys
100 105 110

<210> 346
<211> 53
<212> PRT
<213> homo sapiens

<400> 346

Arg Thr Glu Glu Glu Lys Lys Lys Lys Glu Lys Asn Gln Gln Pro Gln
1 5 10 15

Leu Pro Thr Pro Lys Cys Trp Ser Phe Tyr Val Lys Gly Arg Ile Pro
20 25 30

Gly Tyr Gly His Gly Val Tyr Lys Tyr Val Gly Arg Phe Ser Ala Asn
35 40 45

Ser Phe Pro Thr Val
50

Gly 65	Met	Arg	Lys	Arg	Gly 70	Gly	¹⁴⁴ Glu	Glu	Gly	Arg 75	Arg	Ala	Gly	Leu	Trp 80
Met	His	Asn	Ser	Arg 85	Ala	Arg	Gly	Leu	Gly 90	Arg	Lys	Ile	Pro	Gln 95	Arg
Pro	Ala	Ala	Cys 100	Val	Ala	Leu	Ala	Arg 105	His	Val	Val	Phe	Gly 110	Gly	Arg
Leu	Pro	Ile 115	His	Pro	Val	Glu	Ile 120	Leu	Val	Ala	Gly	Leu 125	Leu	Gly	Gly
Val	Lys 130	Pro	Val	Ser	Asp	Arg 135	Gln	Ala	Gly	Lys	Gly 140	Leu	Gly	Asp	Gly
Gly 145	Cys	Gly	Arg	Glu	Arg 150	Val									

<210> 351
 <211> 108
 <212> PRT
 <213> homo sapiens

<400> 351

Thr 1	Leu	Thr	Ala	His 5	Glu	Gly	Arg	Gly	Gly 10	Lys	Cys	Thr	Glu	Glu 15	Gly
Asp	Ala	Ser	Gln 20	Gln	Glu	Gly	Cys	Thr 25	Leu	Gly	Ser	Asp	Pro 30	Ile	Cys
Leu	Ser	Glu 35	Ser	Gln	Val	Ser	Glu 40	Glu	Gln	Glu	Glu	Met 45	Gly	Gly	Gln
Ser	Ser 50	Ala	Ala	Gln	Ala	Thr 55	Ala	Ser	Val	Asn	Ala 60	Glu	Glu	Ile	Lys
Val 65	Ala	Arg	Ile	His	Glu 70	Cys	Gln	Trp	Val	Val 75	Glu	Asp	Ala	Pro	Asn 80
Pro	Asp	Val	Leu	Leu 85	Ser	His	Lys	Asp	Asp 90	Val	Lys	Glu	Gly	Glu 95	Gly
Gly	Gln	Glu	Ser 100	Phe	Pro	Glu	Leu	Pro 105	Ser	Glu	Glu				

<210> 352
 <211> 77
 <212> PRT
 <213> homo sapiens

<400> 352

Lys 1	Phe	Phe	Gly	Asn 5	Ser	Leu	His	Ala	Thr 10	Pro	Lys	Cys	Thr	Pro 15	Ile
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Thr	Leu	Trp	Leu 20	Phe	Ser	Glu	Lys	Asp 25	Phe	Ser	Gln	Ile	Val 30	Pro	Phe
-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----

Thr	Pro	Leu 35	Arg	Ala	Ala	Leu	Gly 40	Asn	Ser	Pro	Asp	His 45	Leu	Leu	Pro
-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----

Pro	Ser 50	Arg	His	Leu	Cys	Val 55	Thr	Ala	Gly	His	Pro 60	Gly	Leu	Glu	His
-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----

Pro 65	Pro	Pro	Pro	Thr	Asp 70	Thr	His	Glu	Tyr	Gly 75	Leu	Pro
-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----

<210> 353

<211> 122

<212> PRT

<213> homo sapiens

<400> 353

Thr 1	Tyr	Ser	Ile	His 5	Leu	His	Ser	Gln	Thr 10	Lys	Leu	Lys	Ser	Leu 15	Lys
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Val	His	Lys	Lys 20	Ile	Ala	Gln	Leu	Lys 25	Ser	Ala	Glu	Tyr	Thr 30	Gln	Asn
-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----

Cys	His	Pro 35	Thr	Val	Phe	Ser	Val 40	Phe	Pro	Ala	Ile	Leu 45	Phe	Pro	Pro
-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----

Gln	Thr 50	Ser	Ser	Ala	Pro	Ser 55	His	Pro	Lys	Tyr	Ala 60	Ile	Val	Phe	Val
-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----

Ile 65	Leu	Ile	Lys	Ile	Leu 70	Lys	Gln	Lys	Phe	Ile 75	Val	Glu	Gln	Phe	Met 80
-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------

Ser	Thr	Lys	Val	Cys 85	Leu	Ser	Cys	Ser	Cys 90	Pro	Val	Cys	Ile	Ser 95	Ser
-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Gly	Phe	Ile	Ile 100	Gln	Ile	Lys	Lys	Ile 105	Leu	Lys	Asn	Phe	Leu 110	Val	Thr
-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----

Ala	Cys	Met 115	Gln	Pro	Leu	Ser	Val 120	Pro	Leu
-----	-----	------------	-----	-----	-----	-----	------------	-----	-----

<210> 354

<211> 457

<212> PRT

<213> homo sapiens

<400> 354

Pro 1	Val	Cys	Glu	Pro 5	Leu	Ser	Cys	Gly	Ser 10	Pro	Pro	Ser	Val	Ala 15	Asn
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Ala	Val	Ala	Thr 20	Gly	Glu	Ala	His	Thr 25	Tyr	Glu	Ser	Glu	Val 30	Lys	Leu
-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----

Arg	Cys	Leu 35	Glu	Gly	Tyr	Thr	Met 40	Asp	Thr	Asp	Thr	Asp 45	Thr	Phe	Thr
Cys	Gln 50	Lys	Asp	Gly	Arg	Trp 55	Phe	Pro	Glu	Arg	Ile 60	Ser	Cys	Ser	Pro
Lys 65	Lys	Cys	Pro	Leu	Pro 70	Glu	Asn	Ile	Thr	His 75	Ile	Leu	Val	His	Gly 80
Asp	Asp	Phe	Ser	Val 85	Asn	Arg	Gln	Val	Ser 90	Val	Ser	Cys	Ala	Glu 95	Gly
Tyr	Thr	Phe	Glu 100	Gly	Val	Asn	Ile	Ser 105	Val	Cys	Gln	Leu	Asp 110	Gly	Thr
Trp	Glu	Pro 115	Pro	Phe	Ser	Asp	Glu 120	Ser	Cys	Ser	Pro	Val 125	Ser	Cys	Gly
Lys	Pro 130	Glu	Ser	Pro	Glu	His 135	Gly	Phe	Val	Val	Gly 140	Ser	Lys	Tyr	Thr
Phe 145	Glu	Ser	Thr	Ile	Ile 150	Tyr	Gln	Cys	Glu	Pro 155	Gly	Tyr	Glu	Leu	Glu 160
Gly	Asn	Arg	Glu	Arg 165	Val	Cys	Gln	Glu	Asn 170	Arg	Gln	Trp	Ser	Gly 175	Gly
Val	Ala	Ile	Cys 180	Lys	Glu	Thr	Arg	Cys 185	Glu	Thr	Pro	Leu	Glu 190	Phe	Leu
Asn	Gly	Lys 195	Ala	Asp	Ile	Glu	Asn 200	Arg	Thr	Thr	Gly	Pro 205	Asn	Val	Val
Tyr	Ser 210	Cys	Asn	Arg	Gly	Tyr 215	Ser	Leu	Glu	Gly	Pro 220	Ser	Glu	Ala	His
Cys 225	Thr	Glu	Asn	Gly	Thr 230	Trp	Ser	His	Pro	Val 235	Pro	Leu	Cys	Lys	Pro 240
Asn	Pro	Cys	Pro	Val 245	Pro	Phe	Val	Ile	Pro 250	Glu	Asn	Ala	Leu	Leu 255	Ser
Glu	Lys	Glu	Phe 260	Tyr	Val	Asp	Gln	Asn 265	Val	Ser	Ile	Lys	Cys 270	Arg	Glu
Gly	Phe	Leu 275	Leu	Gln	Gly	His	Gly 280	Ile	Ile	Thr	Cys	Asn 285	Pro	Asp	Glu

Thr	Trp 290	Thr	Gln	Thr	Ser	Ala 295	Lys	Cys	Glu	Lys	Ile 300	Ser	Cys	Gly	Pro
Pro 305	Ala	His	Val	Glu	Asn 310	Ala	Ile	Ala	Arg	Gly 315	Val	His	Tyr	Gln	Tyr 320
Gly	Asp	Met	Ile	Thr 325	Tyr	Ser	Cys	Tyr	Ser 330	Gly	Tyr	Met	Leu	Glu 335	Gly
Phe	Leu	Arg	Ser 340	Val	Cys	Leu	Glu	Asn 345	Gly	Thr	Trp	Thr	Ser 350	Pro	Pro
Ile	Cys	Arg 355	Ala	Val	Cys	Arg	Phe 360	Pro	Cys	Gln	Asn	Gly 365	Gly	Ile	Cys
Gln	Arg 370	Pro	Asn	Ala	Cys	Ser 375	Cys	Pro	Glu	Gly	Trp 380	Met	Gly	Arg	Leu
Cys 385	Glu	Glu	Pro	Ile	Cys 390	Ile	Leu	Pro	Cys	Leu 395	Asn	Gly	Gly	Arg	Cys 400
Val	Ala	Pro	Tyr	Gln 405	Cys	Asp	Cys	Pro	Pro 410	Gly	Trp	Thr	Gly	Ser 415	Arg
Cys	His	Thr	Ala 420	Val	Cys	Gln	Ser	Pro 425	Cys	Leu	Asn	Gly	Gly 430	Lys	Cys
Val	Arg	Pro 435	Asn	Arg	Cys	His	Cys 440	Leu	Ser	Ser	Trp	Thr 445	Gly	His	Asn
Cys	Ser 450	Arg	Lys	Arg	Arg	Thr 455	Gly	Phe							
<210>	355														
<211>	210														
<212>	PRT														
<213>	homo sapiens														
<400>	355														
Gly 1	Val	Arg	Ala	Ala 5	Ser	Lys	Glu	Ile	Glu 10	Glu	Leu	Arg	Arg	Ala 15	His
Arg	Glu	Gly	Thr 20	Ser	Arg	Ala	Val	Thr 25	Gly	Glu	Gly	Pro	Ala 30	Ala	Gly
Arg	Met	Thr 35	Val	Pro	Lys	Gln	Thr 40	Gln	Thr	Pro	Asp	Leu 45	Leu	Pro	Glu
Ala	Leu 50	Glu	Ala	Gln	Val	Leu 55	Pro	Arg	Phe	Gln	Pro 60	Arg	Val	Leu	Gln

Val 65	Gln	Ala	Gln	Val	Gln 70	Ser	Gln	Thr	Gln	Pro 75	Arg	Ile	Pro	Ser	Thr 80
Asp	Thr	Gln	Val	Gln 85	Pro	Lys	Leu	Gln	Lys 90	Gln	Ala	Gln	Thr	Gln 95	Thr
Ser	Pro	Glu	His 100	Leu	Val	Leu	Gln	Gln 105	Lys	Gln	Val	Gln	Pro 110	Gln	Leu
Gln	Gln	Glu 115	Ala	Glu	Pro	Gln	Lys 120	Gln	Val	Gln	Pro	Gln 125	Val	Gln	Pro
Gln	Ala 130	His	Ser	Gln	Gly	Pro 135	Arg	Gln	Val	Gln	Leu 140	Gln	Gln	Glu	Ala
Glu 145	Pro	Leu	Lys	Gln	Val 150	Gln	Pro	Gln	Val	Gln 155	Pro	Gln	Ala	His	Phe 160
Thr	Ala	Pro	Arg	Ala 165	Gly	Ala	Ala	Ala	Ala 170	Glu	Glu	Ala	Gly	Pro 175	Asp
Thr	Asp	Phe	Ser 180	Thr	Gly	Ala	His	Thr 185	Gly	His	Ser	Gln	Ala 190	Ser	Arg
His	Arg	Glu 195	Leu	Leu	Pro	Gly	Ala 200	Val	Phe	Ser	Phe	Arg 205	Pro	Pro	Gly
Ala	Gly 210														
<210>	356														
<211>	292														
<212>	PRT														
<213>	homo sapiens														
<400>	356														
Gly 1	Arg	Ala	Gly	Arg 5	Arg	Ala	Thr	Met	Phe 10	Ser	Gln	Gln	Gln	Gln 15	Gln
Gln	Leu	Gln	Gln 20	Gln	Gln	Gln	Gln	Leu 25	Gln	Gln	Leu	Gln	Gln 30	Gln	Gln
Leu	Gln	Gln 35	Gln	Gln	Leu	Gln	Gln 40	Gln	Gln	Leu	Leu	Gln 45	Leu	Gln	Gln
Leu	Leu 50	Gln	Gln	Ser	Pro	Pro 55	Gln	Ala	Arg	Cys	His 60	Gly	Val	Ser	Gly
Gly 65	Pro	Pro	Gln	Gln	Pro 70	Gln	Gln	Pro	Leu	Leu 75	Asn	Leu	Gln	Gly	Thr 80

Asn	Ser	Ala	Ser	Leu 85	Leu	Asn	Gly	Ser	Met 90	Arg	Gln	Arg	Ala	Leu 95	Leu	
Leu	Gln	Gln	Leu 100	Gln	Gly	Leu	Asp	Gln 105	Phe	Ala	Met	Pro	Pro 110	Ala	Thr	
Tyr	Asp	Thr 115	Ala	Gly	Leu	Thr	Met 120	Pro	Thr	Ala	Thr	Leu 125	Gly	Asn	Leu	
Arg	Gly 130	Tyr	Gly	Met	Ala	Ser 135	Pro	Gly	Leu	Ala	Ala 140	Pro	Ser	Leu	Thr	
Pro 145	Pro	Gln	Leu	Ala	Thr 150	Pro	Asn	Leu	Gln	Gln 155	Phe	Phe	Pro	Gln	Ala 160	
Thr	Arg	Gln	Ser	Leu 165	Leu	Gly	Pro	Pro	Pro 170	Val	Gly	Val	Pro	Met 175	Asn	
Pro	Ser	Gln	Phe 180	Asn	Leu	Ser	Gly	Arg 185	Asn	Pro	Gln	Lys	Gln 190	Ala	Arg	
Thr	Ser	Ser 195	Ser	Thr	Thr	Pro	Asn 200	Arg	Lys	Asp	Ser	Ser 205	Ser	Gln	Thr	
Met	Pro 210	Val	Glu	Asp	Lys	Ser 215	Asp	Pro	Pro	Glu	Gly 220	Ser	Glu	Glu	Ala	
Ala 225	Glu	Pro	Arg	Met	Asp 230	Thr	Pro	Glu	Asp	Gln 235	Asp	Leu	Pro	Pro	Cys 240	
Pro	Glu	Asp	Ile	Ala 245	Lys	Glu	Lys	Arg	Thr 250	Pro	Ala	Pro	Glu	Pro 255	Glu	
Pro	Cys	Glu	Ala 260	Ser	Glu	Leu	Pro	Ala 265	Lys	Arg	Leu	Arg	Ser 270	Ser	Glu	
Glu	Pro	Thr 275	Glu	Lys	Glu	Pro	Pro 280	Gly	Gln	Leu	Gln	Val 285	Lys	Ala	Gln	
Pro	Gln 290	Ala	Gly													

<210> 357

<211> 169

<212> PRT

<213> homo sapiens

<400> 357

Pro 1	Arg	Arg	Leu	Pro 5	Ser	Val	Ala	Val	Gly 10	Met	Val	Arg	Pro	Ala 15	Val	
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	--

150

Ser	Tyr	Val	Ala 20	Gly	Gly	Ile	Ala	Asn 25	Trp	Ser	Ser	Pro	Cys 30	Asn	Cys
Cys	Lys	Ser 35	Lys	Ala	Leu	Cys	Arg 40	Met	Glu	Pro	Leu	Arg 45	Arg	Glu	Ala
Glu	Leu 50	Val	Pro	Trp	Arg	Phe 55	Arg	Ser	Gly	Cys	Cys 60	Gly	Cys	Cys	Gly
Gly 65	Pro	Pro	Leu	Thr	Pro 70	Trp	Gln	Arg	Ala	Cys 75	Gly	Gly	Asp	Cys	Trp 80
Ser	Ser	Cys	Trp	Ser 85	Cys	Ser	Asn	Cys	Cys 90	Cys	Cys	Asn	Cys	Cys 95	Cys
Trp	Ser	Cys	Cys 100	Cys	Cys	Asn	Cys	Trp 105	Ser	Cys	Cys	Cys	Cys 110	Cys	Trp
Ser	Cys	Cys 115	Cys	Cys	Cys	Trp	Leu 120	Asn	Met	Val	Ala	Arg 125	Leu	Pro	Ala
Arg	Pro 130	Gln	Arg	Ser	Ser	Arg 135	Pro	His	Gly	Trp	Ala 140	Gly	Pro	Ala	Ala
Pro 145	Thr	Pro	Arg	Pro	Gly 150	Gly	Ser	Gly	Pro	Arg 155	Ala	Pro	Gly	Leu	Pro 160
Ala	Ala	Thr	Pro	Gly 165	Pro	Val	Gly	Ser							

<210> 358
 <211> 158
 <212> PRT
 <213> homo sapiens

<400> 358

Ile 1	Ser	Lys	Thr	Lys 5	Lys	Tyr	Cys	Gly	Ser 10	Pro	Ser	Ser	Arg	Ile 15	Arg
Leu	Glu	Gly	Gly 20	His	Leu	Glu	Met	Arg 25	Lys	Ala	Arg	Gly	Gly 30	Asp	His
Val	Pro	Val 35	Ser	His	Glu	Gln	Pro 40	Arg	Gly	Gly	Glu	Asp 45	Ala	Ala	Ala
Gln	Glu 50	Pro	Arg	Gln	Arg	Pro 55	Glu	Pro	Glu	Leu	Gly 60	Leu	Lys	Arg	Ala
Val 65	Pro	Gly	Gly	Gln	Arg 70	Pro	Asp	Asn	Ala	Lys 75	Pro	Asn	Arg	Asp	Leu 80

151

Lys	Leu	Gln	Ala	Gly 85	Ser	Asp	Leu	Arg	Arg 90	Arg	Arg	Arg	Asp	Leu 95	Gly
Pro	His	Ala	Glu 100	Gly	Gln	Leu	Ala	Pro 105	Arg	Asp	Gly	Val	Ile 110	Ile	Gly
Leu	Asn	Pro 115	Leu	Pro	Asp	Val	Gln 120	Val	Asn	Asp	Leu	Arg 125	Gly	Ala	Leu
Asp	Ala 130	Gln	Leu	Arg	Gln	Ala 135	Ala	Gly	Gly	Ala	Leu 140	Gln	Val	Val	His
Ser 145	Arg	Gln	Leu	Arg	Gln 150	Ala	Pro	Gly	Pro	Pro 155	Glu	Glu	Ser		

<210> 359
 <211> 119
 <212> PRT
 <213> homo sapiens

<400> 359

Gln 1	Ser	Leu	Arg	Thr 5	Leu	Asn	Leu	Lys	Asn 10	Lys	Lys	Val	Leu	Trp 15	Ile
Ser	Leu	Glu	Pro 20	Asn	Ser	Ala	Arg	Gly 25	Arg	Ser	Pro	Gly	Asp 30	Glu	Lys
Gly	Pro	Arg 35	Gly	Gly	Pro	Cys	Ala 40	Cys	Val	Pro	Arg	Ala 45	Ala	Glu	Arg
Arg	Gly 50	Gly	Arg	Cys	Cys	Pro 55	Gly	Ala	Gln	Ala	Glu 60	Ala	Arg	Ala	Arg
Ala 65	Gly	Ala	Gln	Thr	Ser 70	Cys	Pro	Gly	Gly	Pro 75	Glu	Ala	Gly	Gln	Cys 80
Gln	Ala	Gln	Pro	Gly 85	Pro	Glu	Thr	Ala	Gly 90	Trp	Leu	Arg	Pro	Pro 95	Glu
Ala	Thr	Ala	Gly 100	Pro	Trp	Pro	Ser	Cys 105	Arg	Gly	Ser	Ala	Gly 110	Pro	Glu
Gly	Trp	Gly 115	His	His	Trp	Pro									

<210> 360
 <211> 187
 <212> PRT
 <213> homo sapiens

<400> 360

Pro	Pro	Glu	Phe	Gly	Trp	Asp	Ala	Ala	Glu	Thr	Asp	Leu	Leu	Leu	Ala
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

1				5			152		10					15	
Glu	Glu	Gly	Ser 20	Gly	Trp	Arg	Gly	Pro 25	His	Gly	Gln	Gln	Val 30	Leu	Gly
Leu	Leu	Trp 35	Arg	Pro	Arg	Arg	Leu 40	Ser	Lys	Leu	Pro	Ala 45	Val	Asp	His
Leu	Gln 50	Ser	Ser	Pro	Arg	Ser 55	Leu	Ala	Glu	Leu	Gly 60	Ile	Gln	Gly	Ala
Thr 65	Glu	Val	Val	His	Leu 70	Asp	Ile	Arg	Gln	Gly 75	Val	Lys	Ala	Asn	Asp 80
Asp	Pro	Ile	Pro	Arg 85	Gly	Gln	Leu	Thr	Leu 90	Cys	Met	Arg	Ala	Lys 95	Val
Pro	Pro	Ser	Pro 100	Pro	Glu	Val	Gly	Ala 105	Ser	Leu	Gln	Phe	Gln 110	Val	Pro
Val	Gly	Leu 115	Gly	Ile	Val	Arg	Pro 120	Leu	Ala	Pro	Arg	Asp 125	Ser	Ser	Phe
Glu	Pro 130	Gln	Leu	Trp	Leu	Trp 135	Pro	Leu	Pro	Gly	Leu 140	Leu	Gly	Ser	Ser
Val 145	Leu	Pro	Ala	Ser	Arg 150	Leu	Leu	Val	Gly	His 155	Arg	His	Met	Val	Pro 160
Pro	Ala	Gly	Leu	Ser 165	His	Leu	Gln	Val	Thr 170	Ala	Leu	Glu	Pro	Asn 175	Ser
Ala	Arg	Gly	Arg 180	Ser	Thr	Val	Leu	Phe 185	Cys	Phe					

<210> 361
 <211> 86
 <212> PRT
 <213> homo sapiens

<400> 361

Ser 1	Thr	Ile	Ile	Leu 5	Gly	Lys	Ser	Arg	Ile 10	Glu	Phe	Phe	Ser	Arg 15	Cys
Pro	Thr	Arg	Val 20	Gly	Gln	Gly	Pro	Gln 25	Ser	Arg	Leu	Ile	Asn 30	Ser	His
Arg	Ile	Gln 35	Thr	Pro	Gly	Lys	Ile 40	Ala	Leu	Arg	Ser	Gln 45	Leu	Leu	Ser
Ser	Leu 50	Tyr	Gly	Ser	Arg	Lys 55	Asn	Ser	Thr	Lys	Met 60	Thr	Gly	His	Pro

Met	Ser	Val	Met	Pro	Met	Lys	Pro	His	Leu	Leu	Glu	Lys	Pro	Leu	Asn
65					70					75					80

Gln	Asn	Tyr	Leu	Phe	Ser
				85	

<210> 362
 <211> 83
 <212> PRT
 <213> homo sapiens

<400> 362

Ile	Thr	Lys	Ala	Ile	Val	Phe	Ser	Phe	Val	Phe	Ser	Ser	Gly	Tyr	Thr
1				5					10					15	

Val	Glu	Val	Arg	Glu	Ser	Leu	Ile	Leu	Leu	Phe	Gly	Ala	Ile	Ile	Lys
			20					25					30		

Ala	Met	Gln	Gln	Pro	Lys	Ile	Lys	His	Phe	Gly	Ser	Ser	Gln	Asp	Asp
		35					40					45			

Met	Ser	Gly	Asp	Arg	Ser	Cys	Gly	Ser	His	Ser	Asn	Asn	Leu	Met	Gly
	50					55					60				

Pro	Glu	Glu	Lys	Thr	Gly	Val	Asn	Val	Leu	Ser	Phe	Tyr	Tyr	Met	Gln
65					70					75					80

Glu	Leu	Cys
-----	-----	-----

<210> 363
 <211> 117
 <212> PRT
 <213> homo sapiens

<400> 363

Tyr	Lys	Asn	Asp	Arg	Ser	Ser	Tyr	Glu	Arg	His	Ala	Asn	Glu	Thr	Pro
1				5					10					15	

Ser	Ser	Gly	Glu	Ala	Leu	Glu	Ser	Glu	Leu	Ser	Phe	Phe	Leu	Met	Ser
			20					25					30		

Ser	Asp	Ala	Ala	Ser	Phe	Leu	Ile	Phe	Leu	Lys	Thr	Val	Cys	Phe	Cys
		35					40					45			

Gly	Met	Tyr	Ile	Cys	Thr	Pro	Asn	Tyr	Leu	Ala	Leu	Gly	Asn	His	Ser
	50					55					60				

Thr	Thr	Gln	Arg	Gln	Leu	Asn	Lys	Glu	Lys	Phe	Asn	Phe	Lys	Tyr	Gln
65					70					75					80

Val	Leu	Ser	Asn	Ile	Ser	Gln	Thr	Ser	Asp	Phe	Ile	Lys	Gly	Leu	Pro
				85					90					95	

Ala	Asn	Lys	Val	His	Pro	Lys	Tyr	Thr	Gly	Glu	Lys	Ala	Arg	Leu	Leu
			100					105					110		

Gln	Gly	Pro	Arg	Val
		115		

<210> 364
 <211> 83
 <212> PRT
 <213> homo sapiens

<400> 364

Ser	Cys	Arg	Cys	Phe	Tyr	Cys	Met	Pro	Asp	Met	Pro	Leu	Thr	Arg	Phe
1				5					10					15	
Trp	Arg	Thr	Pro	Asn	Ser	Pro	Arg	Met	Thr	Arg	Arg	His	Ser	His	Val
			20					25					30		
Ile	Cys	Ile	Phe	Ser	Tyr	Gln	Leu	Gln	Ile	Val	Ala	Leu	Leu	Arg	Leu
		35					40					45			
Pro	Pro	Val	Gln	Gln	Glu	Met	Glu	Arg	Lys	His	Phe	Ser	Phe	Leu	His
	50					55					60				
Thr	Thr	Pro	Leu	Asp	Asn	Trp	Lys	Tyr	Phe	Trp	Val	Ile	Thr	Ile	Leu
65					70					75					80

Gly	Tyr	Phe
-----	-----	-----

<210> 365
 <211> 144
 <212> PRT
 <213> homo sapiens

<400> 365

Gln	Tyr	Gly	Pro	Ser	Arg	Val	Glu	Val	Glu	Met	Ser	Tyr	Arg	Ile	Ala
1				5					10					15	
Asn	Thr	Leu	Gly	Ser	Phe	Leu	Pro	Arg	Leu	Ala	Gln	Ser	Arg	Gln	Gln
			20					25					30		
Gln	Gln	Asn	Val	Glu	Asp	Ala	Met	Lys	Glu	Met	Gln	Lys	Pro	Leu	Ala
		35					40					45			
Arg	Tyr	Ile	Asp	Asp	Glu	Asp	Leu	Asp	Arg	Met	Leu	Arg	Glu	Gln	Glu
	50					55					60				
Arg	Glu	Gly	Asp	Pro	Met	Ala	Asn	Phe	Ile	Lys	Lys	Asn	Lys	Ala	Lys
65					70					75					80
Glu	Asn	Lys	Asn	Lys	Lys	Val	Arg	Pro	Arg	Tyr	Ser	Gly	Pro	Ala	Pro
				85					90					95	

Pro	Pro	Asn	Arg	Phe	Asn	Ile	Trp	Pro	Gly	Tyr	Arg	Trp	Asp	Gly	Val
			100					105					110		

Asp	Arg	Ser	Asn	Gly	Phe	Glu	Gln	Lys	Arg	Phe	Ala	Arg	Leu	Ala	Ser
		115					120					125			

Lys	Lys	Ala	Val	Glu	Glu	Leu	Ala	Tyr	Lys	Trp	Ser	Val	Glu	Asp	Met
	130					135					140				

<210> 366

<211> 116

<212> PRT

<213> homo sapiens

<400> 366

Lys	Pro	Thr	Lys	His	Arg	Cys	Cys	Gln	His	Pro	Lys	Lys	Tyr	Arg	Tyr
1				5					10					15	

Leu	Asn	Pro	Asn	Ile	Arg	Ser	Arg	Ile	Phe	Phe	Cys	Gly	Gln	Asn	Trp
			20					25					30		

His	Ser	Thr	Ser	Cys	Trp	Ser	Val	Trp	Ala	Pro	Ile	Ile	Ser	Thr	Asp
		35					40					45			

Asn	Cys	Tyr	His	Trp	Ile	Ser	Arg	Cys	Leu	Cys	Pro	Leu	Pro	Gln	Pro
	50					55					60				

Ser	His	Pro	His	Ser	Leu	Arg	Lys	Val	Thr	Tyr	Pro	Gln	His	Ser	Ile
65					70					75					80

Cys	Arg	Gln	Val	Pro	Pro	Leu	Pro	Ser	Cys	Trp	Gln	Ala	Trp	Gln	Ser
				85					90					95	

Ala	Ser	Val	Gln	Ile	His	Trp	Ile	Cys	Pro	Leu	Arg	Pro	Ser	Asp	Ile
			100					105					110		

Gln	Ala	Arg	Tyr
		115	

<210> 367

<211> 160

<212> PRT

<213> homo sapiens

<400> 367

Ser	Ser	Glu	Asn	Pro	Pro	Asn	Thr	Ala	Ala	Val	Asn	Thr	Pro	Arg	Ser
1				5					10					15	

Thr	Gly	Thr	Ser	Ile	Gln	Thr	Ser	Gly	Leu	Glu	Tyr	Ser	Ser	Val	Val
			20					25					30		

Lys	Thr	Gly 35	Ile	Gln	Gln	Val	Ala 40	Gly	Leu	Cys	Gly	Leu 45	Gln	Leu	Leu
Ala	Gln 50	Thr	Thr	Val	Thr	Thr 55	Gly	Tyr	Leu	Ala	Ala 60	Tyr	Ala	His	Tyr
His 65	Ser	Pro	Ala	Thr	Pro 70	Thr	Ala	Ser	Gly	Lys 75	Leu	His	Ile	Leu	Asn 80
Thr	Pro	Phe	Val	Gly 85	Lys	Phe	Leu	His	Cys 90	Leu	Leu	Ala	Gly	Lys 95	Pro
Gly	Lys	Ala	Leu 100	Leu	Phe	Lys	Ser	Ile 105	Gly	Ser	Val	His	Ser 110	Val	Pro
Ala	Ile	Ser 115	Arg	Pro	Asp	Ile	Lys 120	Ser	Val	Gly	Arg	Arg 125	Cys	Trp	Thr
Thr	Val 130	Ala	Arg	Ser	His	Phe 135	Phe	Ile	Leu	Val	Leu 140	Leu	Gly	Leu	Ile
Leu 145	Leu	Asp	Glu	Val	Gly 150	His	Arg	Val	Pro	Leu 155	Ser	Phe	Leu	Phe	Ser 160

<210> 368
 <211> 227
 <212> PRT
 <213> homo sapiens

<400> 368

Trp 1	Glu	Ser	Met	Asn 5	Arg	Trp	Tyr	Val	Lys 10	Pro	Leu	Glu	Thr	Ser 15	Ser
Ser	Lys	Val	Lys 20	Ala	Lys	Thr	Ile	Val 25	Met	Ile	Pro	Asp	Ser 30	Gln	Lys
Leu	Leu	Arg 35	Cys	Glu	Leu	Glu	Ser 40	Leu	Lys	Ser	Gln	Leu 45	Gln	Ala	Gln
Thr	Lys 50	Ala	Phe	Glu	Phe	Leu 55	Asn	His	Ser	Val	Thr 60	Met	Leu	Glu	Lys
Glu 65	Ser	Cys	Leu	Gln	Gln 70	Ile	Lys	Ile	Gln	Gln 75	Leu	Glu	Glu	Val	Leu 80
Ser	Pro	Thr	Gly	Arg 85	Gln	Gly	Glu	Lys	Glu 90	Glu	His	Lys	Trp	Gly 95	Met
Glu	Gln	Gly	Arg 100	Gln	Glu	Leu	Tyr	Gly 105	Ala	Leu	Thr	Gln	Gly 110	Leu	Gln

Gly	Leu	Glu 115	Lys	Thr	Leu	Arg	Asp 120	Ser	Glu	Glu	Met	Gln 125	Arg	Ala	Arg
Thr	Thr 130	Arg	Cys	Leu	Gln	Leu 135	Leu	Ala	Gln	Glu	Ile 140	Arg	Asp	Ser	Lys
Lys 145	Phe	Leu	Trp	Glu	Glu 150	Leu	Glu	Leu	Val	Arg 155	Glu	Glu	Val	Thr	Phe 160
Ile	Tyr	Gln	Lys	Leu 165	Gln	Ala	Gln	Glu	Asp 170	Glu	Ile	Ser	Glu	Asn 175	Leu
Val	Asn	Ile	Gln 180	Lys	Met	Gln	Lys	Thr 185	Gln	Val	Lys	Cys	Arg 190	Lys	Ile
Leu	Thr	Lys 195	Met	Lys	Gln	Gln	Gly 200	His	Glu	Thr	Ala	Ala 205	Cys	Pro	Glu
Thr	Glu 210	Glu	Ile	Pro	Gln	Glu 215	Pro	Val	Ala	Ala	Gly 220	Arg	Met	Thr	Ser
Arg 225	Arg	Asn													

<210> 369
 <211> 155
 <212> PRT
 <213> homo sapiens

<400> 369

Phe 1	Ile	Phe	Ser	Leu 5	Glu	Gly	Ser	Ser	Gly 10	Arg	Ala	Val	Pro	Ala 15	Ala
Gln	Ala	Gly	Gly 20	Lys	Gly	Gly	Ala	Leu 25	Leu	Leu	Lys	Gly	Gly 30	Trp	Glu
Arg	Ser	Trp 35	Ser	Glu	Ser	Glu	Ser 40	Glu	Ser	Gln	Glu	Gly 45	Ser	Gly	Gly
Leu	Arg 50	His	Trp	Cys	Pro	Leu 55	Trp	Pro	Leu	Arg	Leu 60	Glu	Ala	Leu	Gly
Gln 65	Ala	Pro	Glu	His	Lys 70	Val	Arg	Leu	Ser	Met 75	Glu	Phe	Cys	Ser	Thr 80
Cys	Thr	Ala	Asp	His 85	Ile	Ser	Leu	Ser	Ser 90	Phe	Trp	Arg	Ser	Ser 95	Phe
Gln	Gln	Pro	Leu 100	Ala	Pro	Ala	Val	Ser 105	Leu	Gln	Ser	Pro	Asp 110	Arg	Arg

Leu	Ser	His 115	Asp	Pro	Ala	Ala	Ser 120	Ser	Trp	Ser	Gly	Phe 125	Cys	Gly	Ile
Ser	Pro 130	Ala	Phe	Ser	Ala	Phe 135	Ser	Glu	Cys	Ser	Pro 140	Ser	Ser	Leu	Arg
Ser 145	His	Pro	Pro	Ala	Leu 150	Gly	Ala	Ser	Asp	Arg 155					

<210> 370
 <211> 114
 <212> PRT
 <213> homo sapiens

<400> 370

Asp 1	Leu	Ile	Leu	Leu 5	Arg	Leu	Glu	Leu	Leu 10	Ile	Asp	Glu	Gly	His 15	Leu
Leu	Pro	His	Gln 20	Phe	Gln	Leu	Leu	Pro 25	Gln	Glu	Leu	Leu	Ala 30	Val	Pro
Asp	Leu	Leu 35	Gly	Gln	Gln	Leu	Gln 40	Ala	Ala	Ser	Gly	Ala 45	Gly	Pro	Leu
His 50	Leu	Leu	Thr	Val	Thr	Gln 55	Gly	Leu	Leu	Gln	Pro 60	Leu	Lys	Ala	Leu
Gly 65	Gln	Gly	Pro	Ile	Gln 70	Leu	Leu	Pro	Ala	Leu 75	Leu	His	Ala	Pro	Leu 80
Val	Leu	Leu	Leu	Leu 85	Ser	Leu	Ala	Ala	Cys 90	Gly	Ala	Gln	His	Leu 95	Phe
Lys	Leu	Leu	Asn 100	Leu	Asp	Leu	Leu	Gln 105	Ala	Ala	Leu	Leu	Leu 110	Gln	His

Gly His

<210> 371
 <211> 201
 <212> PRT
 <213> homo sapiens

<400> 371

Thr 1	Ala	Ser	Thr	Leu 5	Arg	Ala	Val	Phe	Pro 10	Arg	Pro	Ala	Ser	Glu 15	Ser
Pro	Pro	Leu	Arg 20	Ala	Arg	Ser	Asp	Ala 25	Glu	Asp	Leu	Thr	Ala 30	Ala	Met
Ser	Ser	Asn 35	Glu	Cys	Phe	Lys	Cys 40	Gly	Arg	Ser	Gly	His 45	Trp	Ala	Arg

Glu	Cys 50	Pro	Thr	Gly	Gly	Gly 55	Arg	Gly	Arg	Gly	Met 60	Arg	Ser	Arg	Gly
Arg 65	Gly	Phe	Gln	Phe	Val 70	Ser	Ser	Ser	Leu	Pro 75	Asp	Ile	Cys	Tyr	Arg 80
Cys	Gly	Glu	Ser	Gly 85	His	Leu	Ala	Lys	Asp 90	Cys	Asp	Leu	Gln	Glu 95	Asp
Ala	Cys	Tyr	Asn 100	Cys	Gly	Arg	Gly	Gly 105	His	Ile	Ala	Lys	Asp 110	Cys	Lys
Glu	Pro	Lys 115	Arg	Glu	Arg	Glu	Gln 120	Cys	Cys	Tyr	Asn	Cys 125	Gly	Lys	Pro
Gly	His 130	Leu	Ala	Arg	Asp	Cys 135	Asp	His	Ala	Asp	Glu 140	Gln	Lys	Cys	Tyr
Ser 145	Cys	Gly	Glu	Phe	Gly 150	His	Ile	Gln	Lys	Asp 155	Cys	Thr	Lys	Val	Lys 160
Cys	Tyr	Arg	Cys	Gly 165	Glu	Thr	Gly	His	Val 170	Ala	Ile	Asn	Cys	Ser 175	Lys
Thr	Ser	Glu	Val 180	Asn	Cys	Tyr	Arg	Cys 185	Gly	Glu	Ser	Gly	His 190	Leu	Ala
Arg	Glu	Cys 195	Thr	Ile	Glu	Ala	Thr 200	Ala							

<210> 372
 <211> 189
 <212> PRT
 <213> homo sapiens

<400> 372

Leu 1	Ala	Thr	Ala	Val 5	Thr	Val	Asp	Phe	Thr 10	Cys	Leu	Ala	Ala	Val 15	Asp
Gly	Tyr	Met	Thr 20	Ser	Phe	Thr	Thr	Pro 25	Ile	Ala	Leu	His	Phe 30	Gly	Ala
Val	Phe	Leu 35	Asn	Val	Ser	Glu	Phe 40	Ser	Thr	Arg	Ile	Ala 45	Phe	Leu	Leu
Ile	Cys 50	Met	Val	Ala	Val	Thr 55	Ser	Gln	Met	Ala	Trp 60	Phe	Ala	Thr	Val
Val 65	Ala	Ala	Leu	Leu	Ser 70	Leu	Ser	Leu	Gly	Leu 75	Leu	Ala	Val	Leu	Gly 80

Asn	Val	Ala	Thr	Ser 85	Thr	Ala	Val	Ile	Ala 90	Gly	Ile	Leu	Leu	Lys 95	Ile
Thr	Ile	Leu	Gly 100	Lys	Met	Thr	Arg	Leu 105	Thr	Thr	Ala	Ile	Thr 110	Asn	Ile
Trp	Lys	Arg 115	Arg	Gly	Asn	Lys	Leu 120	Glu	Thr	Ser	Ala	Thr 125	Ala	Ser	His
Ser	Thr 130	Thr	Thr	Ala	Ser	Thr 135	Ser	Arg	Thr	Phe	Pro 140	Gly	Pro	Val	Ala
Arg 145	Ser	Ser	Thr	Leu	Glu 150	Ala	Leu	Ile	Ala	Ala 155	His	Gly	Cys	Ser	Gln 160
Ile	Phe	Arg	Val	Gly 165	Ala	Gly	Pro	Gln	Arg 170	Arg	Arg	Leu	Gly	Arg 175	Arg
Pro	Gly	Glu	Asp 180	Gly	Ser	Gln	Gly	Arg 185	Gly	Cys	Leu	Phe			

<210> 373
 <211> 316
 <212> PRT
 <213> homo sapiens

<400> 373

Gly 1	Gly	Asp	Pro	Val 5	Val	Ser	Ser	Ser	Tyr 10	Arg	Ser	Val	Gly	Cys 15	Ser
Glu	Gln	Gln	Lys 20	Pro	Ala	Ser	Ser	Asp 25	Val	Val	Leu	Pro	Ala 30	Thr	Met
Ser	Tyr	Thr 35	Gly	Phe	Val	Gln	Gly 40	Ser	Glu	Thr	Thr	Leu 45	Gln	Ser	Thr
Tyr	Ser 50	Asp	Thr	Ser	Ala	Gln 55	Pro	Thr	Cys	Asp	Tyr 60	Gly	Tyr	Gly	Thr
Trp 65	Asn	Ser	Gly	Thr	Asn 70	Arg	Gly	Tyr	Glu	Gly 75	Tyr	Gly	Tyr	Gly	Tyr 80
Gly	Tyr	Gly	Gln	Asp 85	Asn	Thr	Thr	Asn	Tyr 90	Gly	Tyr	Gly	Met	Ala 95	Thr
Ser	His	Ser	Trp 100	Glu	Met	Pro	Ser	Ser 105	Asp	Thr	Asn	Ala	Asn 110	Thr	Ser
Ala	Ser	Gly 115	Ser	Ala	Ser	Ala	Asp 120	Ser	Val	Leu	Ser	Arg 125	Ile	Asn	Gln

Arg	Leu 130	Asp	Met	Val	Pro	His 135	Leu	Glu	Thr	Asp	Met 140	Met	Gln	Gly	Gly
Val 145	Tyr	Gly	Ser	Gly	Gly 150	Glu	Arg	Tyr	Asp	Ser 155	Tyr	Glu	Ser	Cys	Asp 160
Ser	Arg	Ala	Val	Leu 165	Ser	Glu	Arg	Asp	Leu 170	Tyr	Arg	Ser	Gly	Tyr 175	Asp
Tyr	Ser	Glu	Leu 180	Asp	Pro	Glu	Met	Glu 185	Met	Ala	Tyr	Glu	Gly 190	Gln	Tyr
Asp	Ala	Tyr 195	Arg	Asp	Gln	Phe	Arg 200	Met	Arg	Gly	Asn	Asp 205	Thr	Phe	Gly
Pro	Arg 210	Ala	Gln	Gly	Trp	Ala 215	Arg	Asp	Ala	Arg	Ser 220	Gly	Arg	Pro	Met
Ala 225	Ala	Gly	Tyr	Gly	Arg 230	Met	Trp	Glu	Asp	Pro 235	Met	Gly	Ala	Arg	Gly 240
Gln	Cys	Met	Ser	Gly 245	Ala	Ser	Arg	Leu	Ala 250	Leu	Pro	Leu	Leu	Pro 255	Glu
His	His	Pro	Arg 260	Val	Arg	His	Val	Pro 265	Gly	Ala	Cys	Glu	Val 270	Gly	Ala
Pro	Ser	Arg 275	Ala	Ala	Ser	Arg	Phe 280	Gly	Phe	Arg	Val	Trp 285	Gln	Trp	His
Glu	Ala 290	Asp	Glu	Gly	Gly	Leu 295	Gly	Arg	Arg	Gly	Pro 300	Gln	Pro	Ile	Cys
Glu 305	Pro	Arg	Arg	Arg	Arg 310	Glu	Ser	Arg	Ala	Ala 315	Phe				

<210> 374

<211> 200

<212> PRT

<213> homo sapiens

<400> 374

Ile 1	Pro	Ala	Ala	Leu 5	Leu	Thr	Gly	Ser	Ile 10	Arg	Met	Pro	Pro	Cys 15	Phe
Leu	Phe	Phe	Phe 20	Leu	Val	Arg	Lys	Ser 25	Ala	Val	Val	Pro	Val 30	Phe	Pro
Val	Arg	Pro 35	His	Leu	Leu	His	Ala 40	Ile	Ala	Lys	Pro	Glu 45	Asn	Gln	Asn

Gly	Lys 50	Pro	Pro	Gly	Lys	Ala 55	Pro	Gln	Pro	Arg	Met 60	Pro	Leu	Glu	His
Ala 65	Val	Leu	Gly	Asp	Asp 70	Val	Leu	Gly	Glu	Glu 75	Gly	Gly	Gln	Ala	Glu 80
Arg	His	Gln	Thr	Cys 85	Thr	Gly	Pro	Gly	Pro 90	Pro	Trp	Gly	Leu	Pro 95	Thr
Cys	Ala	His	Ser 100	Leu	Arg	Pro	Leu	Ala 105	Gly	Arg	Ser	Gly	His 110	Pro	Gly
Pro	Ser	Pro 115	Val	Pro	Trp	Asp	Arg 120	Arg	Cys	Arg	Cys	His 125	Ala	Cys	Gly
Thr	Gly 130	Arg	Gly	Arg	His	Arg 135	Ile	Gly	Pro	His	Arg 140	Pro	Phe	Pro	Ser
Gln 145	Gly	Gln	Ala	Arg	Cys 150	Ser	His	Ser	Leu	Thr 155	Gly	Thr	Gly	Arg	Ala 160
His	Ser	Gly	Arg	Pro 165	Ser	Ser	Arg	Arg	Thr 170	His	Lys	Ser	His	Thr 175	Phe
Leu	His	Leu	Ser 180	Arg	Thr	Arg	Leu	Leu 185	Ala	Ser	Cys	Leu	Ser 190	Pro	Asn
Ala	Ala	Pro 195	Tyr	Leu	Ser	Ala	Gly 200								

<210> 375

<211> 218

<212> PRT

<213> homo sapiens

<400> 375

Ser 1	Thr	Ser	His	Asp 5	Cys	Val	Pro	Gln	Ala 10	Asp	Ala	Ala	Ala	Tyr 15	Ser
Arg	Thr	Ala	Asp 20	Gly	Glu	Thr	Glu	Ala 25	Arg	Gly	Gly	Arg	Gly 30	Gly	Ala
Asp	Leu	Pro 35	Ala	Ser	Pro	Ser	Pro 40	Arg	Pro	Arg	Leu	Ala 45	Pro	Pro	Trp
Pro	Val 50	Arg	Ser	Thr	Arg	Gly 55	Ala	Arg	Arg	Arg	Arg 60	Thr	Ala	Arg	Gly
Gln 65	Ala	Gly	Ser	Ser	Ser 70	Ala	Met	Ala	Ala	Gln 75	Arg	Leu	Gly	Lys	Arg 80

Val	Leu	Ser	Lys	Leu 85	Gln	Ser	Pro	Ser	Arg 90	Ala	Arg	Gly	Pro	Gly 95	Gly	
Ser	Pro	Gly	Gly 100	Leu	Gln	Lys	Arg	His 105	Ala	Arg	Val	Thr	Val 110	Lys	Tyr	
Asp	Arg	Arg 115	Glu	Leu	Gln	Arg	Arg 120	Leu	Asp	Val	Glu	Lys 125	Trp	Ile	Asp	
Gly	Arg 130	Leu	Glu	Glu	Leu	Tyr 135	Arg	Gly	Met	Glu	Ala 140	Asp	Met	Pro	Asp	
Glu 145	Ile	Asn	Ile	Asp	Glu 150	Leu	Leu	Glu	Leu	Glu 155	Ser	Glu	Glu	Glu	Arg 160	
Ser	Arg	Lys	Ile	Gln 165	Gly	Leu	Leu	Lys	Ser 170	Cys	Gly	Lys	Pro	Val 175	Glu	
Asp	Phe	Ile	Gln 180	Glu	Leu	Leu	Ala	Lys 185	Leu	Gln	Gly	Leu	His 190	Arg	Gln	
Pro	Gly	Leu 195	Arg	Gln	Pro	Ser	Pro 200	Ser	His	Asp	Gly	Ser 205	Leu	Ser	Pro	
Leu	Gln 210	Asp	Arg	Ala	Arg	Thr 215	Ala	His	Pro							

<210> 376
 <211> 112
 <212> PRT
 <213> homo sapiens

<400> 376

Asn 1	Gln	Leu	Lys	Leu 5	Lys	Gln	Gln	Ala	Gly 10	Ser	Phe	Ser	Gln	Glu 15	Gly	
Cys	Lys	Gly	Glu 20	Asn	Ile	Leu	Ser	Phe 25	Leu	Leu	Gln	Gly	Asn 30	His	Cys	
Pro	Gly	Val 35	Pro	Ala	Ser	Gly	Arg 40	His	Asn	Leu	Ser	Lys 45	Val	Gln	Gly	
Met	Leu 50	Ala	Arg	Lys	Gly	Gly 55	Ile	Leu	Asp	Cys	Cys 60	Leu	Leu	Ser	Glu	
Pro 65	Ser	Pro	Thr	Pro	Gln 70	Pro	Ala	Ser	Trp	Cys 75	Leu	Phe	Ser	Ser	Lys 80	
Leu	Ser	Leu	Pro	Asn 85	Leu	Ser	Ser	Ser	Glu 90	Gly	Lys	Arg	Glu	Ser 95	Val	

Pro	Gly	Phe	Ser 100	Arg	Val	Gly	Glu	Arg 105	Thr	Gly	Lys	Gly	Thr 110	Asp	Ile
-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----

<210> 377
 <211> 96
 <212> PRT
 <213> homo sapiens

<400> 377

Val 1	Arg	Pro	Glu	His 5	Ser	Leu	Met	Val	Leu 10	Ser	Leu	Asp	Thr	Pro 15	Thr
Ser	Tyr	Leu	Gln 20	Phe	Ser	Arg	Arg	Arg 25	Ala	Ser	Gly	Thr	Leu 30	Gly	Cys
Lys	Pro	Asn 35	Leu	Gly	Ser	Met	Phe 40	Ala	Leu	Asn	Pro	Asn 45	Ser	Gln	Arg
Arg	Ser 50	Glu	Cys	Ile	Phe	His 55	His	Ala	Ala	Ala	Gly 60	Cys	Trp	Pro	Arg
Phe 65	Cys	Val	Phe	Ser	Gln 70	Pro	Ser	Glu	Ile	Thr 75	Ser	Phe	Leu	Val	Ala 80
Val	Thr	Asn	Ser	Ser 85	Trp	Thr	Thr	Met	Lys 90	Leu	Ile	Tyr	Phe	Pro 95	Ile

<210> 378
 <211> 145
 <212> PRT
 <213> homo sapiens

<400> 378

Ser 1	Asn	Arg	Leu	Val 5	Ala	Ser	Pro	Lys	Lys 10	Asp	Ala	Arg	Val	Lys 15	Thr
Phe	Phe	Pro	Ser 20	Phe	Cys	Arg	Glu	Ile 25	Ile	Ala	Leu	Val	Cys 30	Gln	Pro
Val	Val	Gly 35	Thr	Thr	Phe	Gln	Lys 40	Phe	Lys	Gly	Cys	Trp 45	Leu	Glu	Lys
Glu	Val 50	Phe	Trp	Ile	Ala	Ala 55	Ser	Ser	Gln	Asn	Pro 60	Leu	Leu	Pro	His
Ser 65	Leu	Pro	Pro	Gly	Val 70	Phe	Phe	Pro	Pro	Asn 75	Ser	Leu	Tyr	Leu	Thr 80
Ser	Leu	His	Gln	Lys 85	Ala	Ser	Gly	Asn	Leu 90	Phe	Arg	Val	Ser	Val 95	Glu

Trp	Glu	Lys	Gly 100	Gln	Ala	Lys	Ala 165	Gln 105	Ile	Phe	Arg	Arg	Glu 110	Ser	Ser
Tyr	Phe	Trp 115	Pro	Leu	His	Val	Pro 120	Tyr	Ser	Gly	Ile	Val 125	Gly	Pro	Asp
Asp	Trp 130	His	Ser	Asp	Ser	Gln 135	Leu	Trp	Phe	Trp	Glu 140	Asn	Ile	Arg	Gly

Ser
145

<210> 379
 <211> 429
 <212> PRT
 <213> homo sapiens

<400> 379

Arg 1	Gln	Phe	Glu	Ile 5	Thr	Ser	Ile	Ser	Val 10	Asp	Val	Trp	His	Ile 15	Leu
Glu	Phe	Asp	Tyr 20	Ser	Arg	Leu	Pro	Lys 25	Gln	Ser	Ile	Gly	Gln 30	Phe	His
Glu	Gly	Asp 35	Ala	Tyr	Val	Val	Lys 40	Trp	Lys	Phe	Met	Val 45	Ser	Thr	Ala
Val	Gly 50	Ser	Arg	Gln	Lys	Gly 55	Glu	His	Ser	Val	Arg 60	Ala	Ala	Gly	Lys
Glu 65	Lys	Cys	Val	Tyr	Phe 70	Phe	Trp	Gln	Gly	Arg 75	His	Ser	Thr	Val	Ser 80
Glu	Lys	Gly	Thr	Ser 85	Ala	Leu	Met	Thr	Val 90	Glu	Leu	Asp	Glu	Glu 95	Arg
Gly	Ala	Gln	Val 100	Gln	Val	Leu	Gln	Gly 105	Lys	Glu	Pro	Pro	Cys 110	Phe	Leu
Gln	Cys	Phe 115	Gln	Gly	Gly	Met	Val 120	Val	His	Ser	Gly	Arg 125	Arg	Glu	Glu
Glu	Glu 130	Glu	Asn	Val	Gln	Ser 135	Glu	Trp	Arg	Leu	Tyr 140	Cys	Val	Arg	Gly
Glu 145	Val	Pro	Val	Glu	Gly 150	Asn	Leu	Leu	Glu	Val 155	Ala	Cys	His	Cys	Ser 160
Ser	Leu	Arg	Ser	Arg 165	Thr	Ser	Met	Val	Val 170	Leu	Asn	Val	Asn	Lys 175	Ala

Leu	Ile	Tyr	Leu 180	Trp	His	Gly	Cys 166	Lys 185	Ala	Gln	Ala	His	Thr 190	Lys	Glu
Val	Gly	Arg 195	Thr	Ala	Ala	Asn	Lys 200	Ile	Lys	Glu	Gln	Cys 205	Pro	Leu	Glu
Ala	Gly 210	Leu	His	Ser	Ser	Ser 215	Lys	Val	Thr	Ile	His 220	Glu	Cys	Asp	Glu
Gly 225	Ser	Glu	Pro	Leu	Gly 230	Phe	Trp	Asp	Ala	Leu 235	Gly	Arg	Arg	Asp	Arg 240
Lys	Ala	Tyr	Asp	Cys 245	Met	Leu	Gln	Asp	Pro 250	Gly	Ser	Phe	Asn	Phe 255	Ala
Pro	Arg	Leu	Phe 260	Ile	Leu	Ser	Ser	Ser 265	Ser	Gly	Asp	Phe	Ala 270	Ala	Thr
Glu	Phe	Val 275	Tyr	Pro	Ala	Arg	Ala 280	Pro	Ser	Val	Val	Ser 285	Ser	Met	Pro
Phe	Leu 290	Gln	Glu	Asp	Leu	Tyr 295	Ser	Ala	Pro	Gln	Pro 300	Ala	Leu	Phe	Leu
Val 305	Asp	Asn	His	His	Glu 310	Val	Tyr	Leu	Trp	Gln 315	Gly	Trp	Trp	Pro	Ile 320
Glu	Asn	Lys	Ile	Thr 325	Gly	Ser	Ala	Arg	Ile 330	Arg	Trp	Ala	Ser	Asp 335	Arg
Lys	Ser	Ala	Met 340	Glu	Thr	Val	Leu	Gln 345	Tyr	Cys	Lys	Gly	Lys 350	Asn	Leu
Lys	Lys	Pro 355	Ala	Pro	Lys	Ser	Tyr 360	Leu	Ile	His	Ala	Gly 365	Leu	Glu	Pro
Leu	Thr 370	Phe	Thr	Asn	Met	Phe 375	Pro	Ser	Trp	Glu	His 380	Arg	Glu	Asp	Ile
Ala 385	Glu	Ile	Thr	Glu	Met 390	Asp	Thr	Glu	Val	Ser 395	Asn	Gln	Ile	Thr	Leu 400
Val	Glu	Asp	Val	Leu 405	Ala	Lys	Leu	Cys	Lys 410	Thr	Ile	Tyr	Pro	Leu 415	Ala
Asp	Leu	Leu	Ala 420	Arg	Pro	Leu	Pro	Glu 425	Gly	Ser	Ile	Leu			

<210> 380

<211> 169

<212> PRT
 <213> homo sapiens

<400> 380

Asp 1	Val	Phe	His	Glu 5	Gly	Asp	Leu	Ile	Gly 10	Asn	Phe	Arg	Val	His 15	Leu
Cys	Asp	Leu	Ser 20	Asp	Val	Leu	Ser	Val 25	Leu	Pro	Ala	Gly	Lys 30	His	Ile
Gly	Glu	Cys 35	Gln	Gly	Leu	Gln	Thr 40	Ser	Val	Asp	Lys	Val 45	Arg	Leu	Gly
Gly	Trp 50	Phe	Leu	Glu	Ile	Phe 55	Ser	Phe	Ala	Val	Leu 60	Glu	His	Ser	Leu
His 65	Arg	Thr	Leu	Pro	Val 70	Gly	Gly	Pro	Ala	Asp 75	Ala	Gly	Gly	Thr	Ser 80
Asp	Leu	Val	Leu	Asp 85	Gly	Pro	Pro	Ala	Leu 90	Pro	Glu	Val	His	Leu 95	Val
Val	Ile	Val	Asn 100	Lys	Glu	Lys	Cys	Trp 105	Leu	Gly	Arg	Ala	Val 110	Gln	Ile
Phe	Leu	Gln 115	Glu	Gly	His	Gly	Thr 120	Asp	His	Arg	Gly	Gly 125	Ser	Gly	Arg
Val	His 130	Lys	Leu	Cys	Gly	Cys 135	Lys	Ile	Pro	Arg	Gly 140	Ala	Ala	Glu	Asp
Glu 145	Gln	Ala	Gly	Arg	Glu 150	Val	Lys	Thr	Ser	Arg 155	Ile	Leu	Lys	His	Ala 160
Ile	Val	Gly	Phe	Pro 165	Val	Ser	Pro	Ser							

<210> 381
 <211> 234
 <212> PRT
 <213> homo sapiens

<400> 381

Gly 1	Ile	Pro	Glu	Ser 5	Glu	Trp	Leu	Gly	Ala 10	Phe	Ile	Thr	Leu	Val 15	Tyr
Cys	Asp	Phe	Ala 20	Ala	Thr	Met	Gln	Ser 25	Cys	Phe	Gln	Gly	Thr 30	Leu	Phe
Leu	Asp	Leu 35	Val	Arg	Ser	Gly	Pro 40	Ser	Asp	Leu	Leu	Arg 45	Val	Gly	Leu

Gly	Phe	Ala	Ser	Val	Pro	Gln	Val	Asp	Glu	Gly	Leu	Val	Asp	Val	Lys
	50					55	168				60				
His	His	His	Gly	Ser	Ser	Gly	Pro	Gln	Ala	Ala	Thr	Val	Thr	Gly	His
65					70				75						80
Phe	Gln	Gln	Ile	Pro	Phe	His	Gly	His	Leu	Ser	Thr	His	Ala	Val	Gln
				85					90					95	
Pro	Pro	Leu	Thr	Leu	His	Ile	Phe	Phe	Phe	Leu	Phe	Pro	Pro	Pro	Arg
			100					105					110		
Val	His	His	His	Pro	Pro	Leu	Glu	Thr	Leu	Gln	Glu	Thr	Gly	Gly	Leu
		115					120					125			
Leu	Ser	Leu	Glu	Asn	Leu	Asp	Leu	Gly	Pro	Pro	Phe	Leu	Val	Gln	Leu
	130					135					140				
His	Arg	His	Gln	Arg	Arg	Arg	Ala	Leu	Leu	Thr	His	Gly	Gly	Val	Pro
145					150					155					160
Ala	Leu	Pro	Glu	Glu	Val	Asp	Ala	Leu	Leu	Phe	Ala	Gly	Cys	Pro	His
				165					170					175	
Arg	Val	Leu	Ser	Leu	Leu	Ala	Thr	Ser	His	Cys	Arg	Ala	His	His	Glu
			180					185					190		
Leu	Pro	Leu	Asp	His	Ile	Gly	Ile	Pro	Leu	Met	Glu	Leu	Pro	Asp	Ala
		195					200					205			
Leu	Phe	Gly	Glu	Pro	Ala	Ile	Val	Glu	Phe	Gln	Asp	Val	Pro	Asp	Ile
	210					215					220				
His	Gly	Asn	Ala	Gly	Asp	Leu	Lys	Leu	Pro						
225					230										

<210> 382
 <211> 81
 <212> PRT
 <213> homo sapiens

<400> 382

Arg	Leu	Phe	Ala	Pro	Leu	Arg	Thr	Ser	Trp	Ala	Val	Val	Ile	Pro	Gly
1				5					10					15	
Ala	Arg	Val	Ala	Leu	Cys	Phe	Tyr	Lys	Ile	Met	Thr	Tyr	Val	Thr	Cys
			20					25					30		
Leu	His	Val	Cys	Leu	Leu	Val	Glu	Phe	Leu	Asn	Ser	Gln	Leu	Thr	Asn
		35					40					45			

His Arg Lys Tyr Tyr Phe Leu ¹⁶⁹ Ser Tyr Gly Phe Trp Phe Thr Gly Leu
 50 55 60

Arg Gly Phe Ser Glu Tyr Leu Trp Pro Gln Gln His Thr Gln Phe Pro
 65 70 75 80

Ser

<210> 383
 <211> 61
 <212> PRT
 <213> homo sapiens

<400> 383

Ile Val Asn Arg Thr Thr Ala Cys Thr Leu Phe Glu Val Asn Leu Glu
 1 5 10 15

Trp Lys Ala Arg Asp Tyr Thr Leu Phe Lys Ile Asp Ile Cys Gly Ala
 20 25 30

His Thr Ile Tyr Glu Ile Val Pro Ser Lys Lys Glu Lys Lys Lys Ile
 35 40 45

Arg Arg Ser Asn Leu Glu Gln His Cys Leu Ile Lys Ala
 50 55 60

<210> 384
 <211> 56
 <212> PRT
 <213> homo sapiens

<400> 384

Pro Pro Asp Phe Phe Phe Leu Phe Phe Arg Gly Tyr Tyr Phe Ile Tyr
 1 5 10 15

Cys Val Ser Pro Thr Asn Val Tyr Phe Lys Lys Ser Ile Val Pro Gly
 20 25 30

Leu Pro Phe Gln Ile His Leu Lys Glu Ser Thr Cys Ser Ser Pro Val
 35 40 45

Tyr Asn Leu Ile Glu Met Arg Lys
 50 55

<210> 385
 <211> 139
 <212> PRT
 <213> homo sapiens

<400> 385

Leu Asp Ser Ser His Cys Cys Ser Cys Ser Thr Ala Leu Phe Arg Thr
 1 5 10 15

Gln Thr Thr Ala Ala Ala Val Pro Arg Met Val Ile Arg Val Tyr Ile
 20 25 30

Ala	Ser	Ser 35	Ser	Gly	Ser	Thr	Ala 40	Ile	Lys	Lys	Lys	Gln 45	Gln	Asp	Val
Leu	Gly 50	Phe	Leu	Glu	Ala	Asn 55	Lys	Ile	Gly	Phe	Glu 60	Glu	Lys	Asp	Ile
Ala 65	Ala	Asn	Glu	Glu	Asn 70	Arg	Lys	Trp	Met	Arg 75	Glu	Asn	Val	Pro	Glu 80
Asn	Ser	Arg	Pro	Ala 85	Thr	Gly	Tyr	Pro	Leu 90	Pro	Pro	Gln	Ile	Phe 95	Asn
Glu	Ser	Gln	Tyr 100	Arg	Gly	Asp	Tyr	Asp 105	Ala	Phe	Phe	Glu	Ala 110	Arg	Glu
Asn	Asn	Ala 115	Val	Tyr	Ala	Phe	Leu 120	Gly	Leu	Thr	Ala	Pro 125	Pro	Gly	Ser
Lys	Glu 130	Ala	Glu	Val	Gln	Ala 135	Lys	Gln	Gln	Ala					

<210> 386

<211> 95

<212> PRT

<213> homo sapiens

<400> 386

Glu 1	Thr	Lys	His	Ile 5	Leu	Leu	Phe	Leu	Leu 10	Asn	Arg	Cys	Arg	Ala 15	Arg
Gly	Arg	Cys	Asn 20	Ile	Tyr	Thr	Asp	His 25	His	Pro	Gly	Asn	Ser 30	Gly	Cys
Gly	Cys	Leu 35	Gly	Pro	Glu	Lys	Gly 40	Cys	Gly	Ala	Ala	Ala 45	Ala	Met	Ala
Gly	Ile 50	Gln	Leu	Gly	Ala	Glu 55	Thr	Ala	Val	Gly	Arg 60	Glu	Gly	Trp	Gly
Lys 65	Val	Glu	Gly	Glu	Leu 70	Ala	Arg	Ala	Pro	Pro 75	Pro	Pro	Leu	Ala	Ala 80
Ser	Thr	Glu	Leu	Ser 85	Lys	Arg	Cys	Ser	Ser 90	Ser	Pro	Lys	Pro	Arg 95	

<210> 387

<211> 96

<212> PRT

<213> homo sapiens

<400> 387

Phe	Cys	Ile	His	Phe	Glu	Cys	Leu	His	Val	Lys	Thr	Gln	Leu	Ile	Tyr
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

1				5			171		10					15		
Tyr	Phe	Asn	Ile 20	Lys	Pro	Ile	Ser	Phe 25	Glu	Ala	Lys	Leu	Ile 30	Leu	Leu	
Phe	Tyr	Lys 35	Ser	Asn	Gly	Asp	Ser 40	Phe	Phe	Arg	Met	Leu 45	Lys	Ala	Gln	
Cys	Leu 50	Arg	Phe	Met	Leu	Ala 55	Ala	Leu	Leu	Ala	Leu 60	Leu	Leu	Pro	Leu	
Asn 65	Gln	Val	Gly	Leu	Ser 70	Ser	Leu	Arg	Arg	His 75	Thr	Leu	His	Tyr	Phe 80	
Leu	Trp	Leu	Gln	Arg 85	Arg	His	His	Ser	Pro 90	Arg	Asp	Thr	Gly	Phe 95	His	

<210> 388
 <211> 221
 <212> PRT
 <213> homo sapiens

<400> 388

Phe 1	Ile	Met	Leu	Asn 5	Ile	Ile	Leu	Ile	Lys 10	Phe	Ser	Ser	Phe	Ser 15	Ile	
Arg	Cys	Ala	Ile 20	Leu	Ser	Ser	Val	Cys 25	Leu	Asn	Glu	Ala	Ile 30	Thr	Phe	
Ala	Phe	Leu 35	Leu	Gln	Val	Phe	Leu 40	Trp	Asn	Met	Asp	Lys 45	Tyr	Thr	Met	
Ile	Arg 50	Lys	Leu	Glu	Gly	His 55	His	His	Asp	Val	Val 60	Ala	Cys	Asp	Phe	
Ser 65	Pro	Asp	Gly	Ala	Leu 70	Leu	Ala	Thr	Ala	Ser 75	Tyr	Asp	Thr	Arg	Val 80	
Tyr	Ile	Trp	Asp	Pro 85	His	Asn	Gly	Asp	Ile 90	Leu	Met	Glu	Phe	Gly 95	His	
Leu	Phe	Pro	Pro 100	Pro	Thr	Pro	Ile	Phe 105	Ala	Gly	Gly	Ala	Asn 110	Asp	Arg	
Trp	Val	Arg 115	Ser	Val	Ser	Phe	Ser 120	His	Asp	Gly	Leu	His 125	Val	Ala	Ser	
Leu	Ala 130	Asp	Asp	Lys	Met	Val 135	Arg	Phe	Trp	Arg	Ile 140	Asp	Glu	Asp	Tyr	
Pro	Val	Gln	Val	Ala	Pro	Leu	Ser	Asn	Gly	Leu	Cys	Cys	Ala	Phe	Ser	

145					150		172			155				160	
Thr	Asp	Gly	Ser	Val 165	Leu	Ala	Ala	Gly	Thr 170	His	Asp	Gly	Ser	Val 175	Tyr
Phe	Trp	Ala	Thr 180	Pro	Arg	Gln	Val	Pro 185	Ser	Leu	Gln	His	Leu 190	Cys	Arg
Met	Ser	Ile 195	Arg	Arg	Val	Met	Pro 200	Thr	Gln	Glu	Val	Gln 205	Glu	Leu	Pro
Ile	Pro 210	Ser	Lys	Leu	Leu	Glu 215	Phe	Leu	Ser	Tyr	Arg 220	Ile			

<210> 389
 <211> 118
 <212> PRT
 <213> homo sapiens

<400> 389

Lys 1	Gly	Gly	Ala	Thr 5	Cys	Pro	Glu	Ser	Pro 10	Gln	Asp	Arg	Lys	Arg 15	Arg
Gly	Asn	Leu	Asp 20	Met	Glu	Lys	Leu	Tyr 25	Ser	Glu	Asn	Glu	Gly 30	Met	Ala
Ser	Asn	Gln 35	Gly	Lys	Met	Glu	Asn 40	Glu	Glu	Gln	Pro	Gln 45	Asp	Glu	Arg
Lys	Pro 50	Glu	Val	Thr	Cys	Thr 55	Leu	Glu	Asp	Lys	Lys 60	Leu	Glu	Asn	Glu
Gly 65	Lys	Thr	Glu	Asn	Lys 70	Gly	Lys	Thr	Gly	Asp 75	Glu	Glu	Met	Leu	Lys 80
Asp	Lys	Gly	Lys	Pro 85	Glu	Ser	Glu	Gly	Glu 90	Ala	Lys	Glu	Gly	Lys 95	Ser
Glu	Arg	Glu	Gly 100	Glu	Ser	Glu	Met	Glu 105	Glu	Val	Glu	Arg	Glu 110	Gly	Thr
Arg	Gly	Arg 115	Gly	Ser	Gly										

<210> 390
 <211> 138
 <212> PRT
 <213> homo sapiens

<400> 390

Arg 1	Phe	Pro	Tyr	Leu 5	Gly	Phe	Pro	Leu	Ser 10	Arg	Pro	Pro	Pro	Ser 15	Leu
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Thr	Leu	Pro	Pro 20	Ser	Leu	Thr	173 Phe	Leu 25	Leu	Leu	Pro	Leu	Pro 30	His	Ser
Leu	Ala	Phe 35	Leu	Tyr	Pro	Leu	Thr 40	Phe	Pro	His	Leu	Leu 45	Phe	Cys	Pro
Cys	Phe 50	Leu	Ser	Phe	Pro	Arg 55	Phe	Leu	Thr	Ser	Cys 60	Leu	Pro	Glu	Tyr
Lys 65	Leu	Leu	Leu	Ala	Phe 70	Ser	Arg	Leu	Val	Ala 75	Val	Leu	His	Phe	Pro 80
Ser	Phe	Leu	Gly	Leu 85	Lys	Pro	Phe	Leu	His 90	Phe	His	Cys	Arg	Val 95	Phe
Pro	Cys	Arg	Asp 100	Phe	Pro	Ser	Phe	Ser 105	Cys	Pro	Ala	Gly	Ile 110	Leu	Asp
Arg	Leu	Leu 115	Leu	Leu	Phe	Ser	Phe 120	Ala	Glu	Arg	Trp	Glu 125	Gln	Gln	Thr
Arg	Arg 130	Pro	Gly	Arg	Ser	Trp 135	Thr	Lys	Asn						

<210> 391
 <211> 3218
 <212> DNA
 <213> homo sapiens

<400> 391

```

gcgaccacga gctggtgcat ccatcagtac ccttgccgga ctttccctta aagaaggaga 60
ggatcagaaa gagataaaga ttgagccagc tcagggtgtg gatgaagtgg aacctctacc 120
tgaagactat tatacaagac cagtaaaattt aacagaggta acaacccttc agcagcgtct 180
gttacagcct gacttccagc cagtctgtgc ttcacagctc tatcctcgcc acaaacatct 240
tctgatcaaa cgggtccctgc gctgccgtaa atgtgaacat aatttgagca agccagaatt 300
taacccaacg tcaatcaaatt caaaaatcca gctggctcgt gtcaattata ttccagaagt 360
gagaatcatg tcaattccca accttcgcta catgaaggag agccagggtcc tcctgactct 420
tacaaatcca gttgagaacc tcacccatgt gactctcttc gagtgtgagg aggggggacc 480
tgatgatata aacagcactg ctaaggtggt ggtgcctccc aaagagctcg ttttagctgg 540
caaggatgca gcagcagagt acgatgagtt ggcagaacct caagactttc aggacgatcc 600
tgacattata gccttcagaa aggccaacaa agtgggtatt ttcacaaag ttacaccaca 660
gcgtgaggag ggtgaagtga ccgtgtgctt caagatgaag catgatttta aaaacctggc 720
agccccatt cgccccattg aagaaagtga ccagggaaca gaagtcattt gggtcaccca 780
gcatgtggaa cttagcttgg gccacttct tccttaaaag gttccactgg agggcagatc 840
ccaaaggaca gtatcacctg aaacctgcgt taaaatgtgg aagctgctgc ttcattaggc 900
cttgtttata acgatgtacc catgcactac ggaattctat tgctaagaaa gtgggagcat 960
aggcaaggca ttgggaacac agggtagctg ctgttgctct tgctctcacc cctgttgaca 1020
ccagtaagtc tgtgtctccc tctactgaacc ctgcacgttg agtaacagca gcataattcc 1080
atcctaggaa aggggatggg tgttccttgg aatggcattg tatctaccac ctgagaaaact 1140
ctgtactgtc tcttgatctg atctcactaa ggatcacaat gtcacagatg aaacttaaat 1200
gataacccaa aggtagacct gctgttaatg atccagcatt ggtcacaaatg taccactgc 1260
tttctgcatt cggttaaata tcatctaaca ctctaaaaca tatcccttca ttgccataat 1320
gggtgccatt ttgccataga ttcccatata actgaaaaac tgaattgtca ctttatcttt 1380
agtatcatga tgattggaaa aacctgtgaa gttgttaagg cactctcatt tgccctcttt 1440
ttctaagtga atacaggaca cgtattagtt gttcttaann nnnnnnnnnn nnnnnnnnn 1500
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnncaaggg ggtagcagat 1560
tccattcgtt ttcaatattg ccacaatacc cagggattaa tgctgccaca ggggggcaat 1620

```

```

ctttatttgt cttacttcct accccttccc tgttctgcct ctttaactca gttaagttgt1680
tctgtttggg acctggaaaa gaacccaaag aaaacctgag tggacagggt catttctgga1740
atgcagaaaa catttttaaag gctagatttt tagaatattc tcaactagca ttctttccat1800
tgatttgaag gggaaattaa ctattataat ctcttgaatc caaaactgga tattaagaac1860
tttccccctt actaagttaa agacttttgt catgtgggtg gtcaaataag accattttga1920
ttgtaaacca taaaatagtt cagcaagtag cccacagttc tggcctaaca gcagacttgc1980
tgtttttact tgggtatcctg gagttgggtt gctaaccctta atttctatga tgttttctaa2040
aatgaaactt gataaagtag accaccagct gcaccgtgtt ttctgtaaaa gtattgttag2100
taagtggcca agagacttga ggaaaaataca gattttttgt ttaccttggg cttgttttaa2160
gtcttaaaaa attaaagata acattataat gtagaataca gatgggacat agtccttcta2220
agcttccctt gaaaatgttt taaatattta ggaagctttt aaaagacact aaatttgtact2280
ctaaaagaca ctaaattgta ctaattgtac aaagggtcaag ccaattttat gaaacagtcc2340
tacagagtaa tatatgtgat gcagtgtgag aaggaaaata ctcactctta acattatggg2400
aataacattt agcctcttag gagttggagc agggggatgg gtaattacag atttgcagac2460
tatagaaaaa gtttcatttt tttgtgacct cacagagtct caaattttta tttcactacc2520
tgctagagcc tactgtgaaa tcactgctcc atatttgcca gtggaggaaa tgggcataga2580
gtagagaata gcttcatatg gtttacacgt ttgcatagac tacacacatg tcatgcgttt2640
atggcaggta gctggtatct atccccaaag taataatgtt gaagtatggg tctcatcatt2700
cccatacaca gaaacacaaa acactttgat cataaacttt tttcttcaga agccaaacta2760
acttgcagaa taatagagcc actggtttaa tgtttcctca agatagggtt tagtgtaagc2820
tagtattctg tgtgttctgt gaaatgatcc aatacctgca gctgggtgaat taggaattgt2880
atttgttgcc ttttttatat tagatgaggt gcaaaaaatt taatgctagt cagtatgcac2940
caccacagga aagttagatc ccattagcac ttgaaactac agctttggaa acttaggcta3000
agttaatttg gatttgttac ttgattcacc tactgacctt ttcttttgtt tgaagtgcct3060
atcagcataa tgagctaagt gtcatgcata tttgtgaaga aacacccttt ttgggtccct3120
ttgggacaga gaggtactcc ttgatcttta tgaatgacag gttactgttt tgccttattg3180
cttaacttaa tgtagtgaaa taaagcagac aaagcttg 3218

```

<210> 392
<211> 750
<212> DNA
<213> homo sapiens

<400> 392

```

gtgagggaca gatggacaga atgcagaggt acatagatga gctgaggctg atccagctcc 60
cctgaaattc agagtgttaa cttttagtag cctgcacaat ctcttggtgc tatctagcca120
ttacccccat ttttttttta aaggccatct gaaattccat ttgtcatggg gggaagcatt180
ttggatatga tgcaggaaat ctcttcctgg agtcaaaagt tcccaagagg tccgtatttt240
ttaagaaatg gaatttatat aaataatatt taagcttgtg cccatgttgg ccgggcaact300
tttttcaatg gtgcttatta gaagaagttt tttcatcttg tcatttttaag aaaataaaac360
tggaatttga atatgggttg catgattgta cccttttagt tctcttattt ttctactcct420
ctgtccctct ataactatgc catactatta gatgctggtc cactgaatgc tgagatgatc480
tgttttttgg ggtttttttt ttttaagaaa tattttcact ggttttctgt gactctctaa540
acacttcacg gaaactagga agactgaatt atgagggaaa ctatttgagg ttagtgggca600
gaaacgatga aatcttatag atcttttgac agtttctctg tttaggggga gcctaggact660
gatatccaag tttcttccat atccaagctt cattggggga ccccatcttg gctttaacag720
gtgacccggc cctctttacc gggcttccag 750

```

<210> 393
<211> 546
<212> DNA
<213> homo sapiens

<400> 393

```

cacgaggagg cggggagtgg aacccccctt tttgagaagg ttgcctgact cagagacaca 60
gaaacgggtc cagggatggg gagagatgtg gagtgaggga aggtttgcat ttgagaaagg120
aagttcgaga acacactggg acattgtaac acatttgaac catcttctga tagaaaggtg180
ttggcctcct aataatggga ggtcagggcc aggtcctcgg gcatagggag aggggtccgga240
gaatgctgca gacccctgcc cactgccacg ggtctcggct ccctgcacct gcctctgatg300
gtgcagctct gattccgtgt ctctctcat tgcagattta tgaaggtgcc taccatgttc360
tccacaagga gcttcttgaa gtcaccaact ccgtcttcca tgaaataaac atgtgggtct420
ctcaaaggac agccacggca ggaactgcgt cccacccctg aatgcattgg ccggtgcccg480
gctcatggtc tgggggatgc aggcagggga agggcagaga tggcttctca gatatggctt540

```


gcaaaa

546

<210> 394
 <211> 2453
 <212> DNA
 <213> homo sapiens

<400> 394

```

cctgacgggga ccaaggcggc gggagtctgc ggtcggtccc tcggctgtgg accgggcggc 60
acgacgcggt gcagggtaac atggcggatg cggaagtaat tattttgcca aagaaacata 120
agaagaaaaa ggagcggag tcattgccag aagaagatgt agccgaaata caacacgctg 180
aagaatTTTT tatcaaacct gaatccaaag ttgctaagtt ggacacgtct cagtggcccc 240
ttttgctaaa gaattttgat aagctgaatg taaggacaac acactataca cctcttgcac 300
gtggttcaaa tcctctgaag agagagattg gggactatat caggacaggt ttcattaatc 360
ttgacaagcc ctctaaccct tcttcccatg aggtggtagc ctggattcga cggatacttc 420
gggtggagaa gacagggcac agtggtactc tggatcccaa ggtgactggt tgtttaatcg 480
tgtgcataga acgagccact cgcttggtga agtcacaaca gagtgcaggc aaagagtatg 540
tggttgattgt cgggctgcac aatgctattg aaggggggac ccagctttct agggccctag 600
aaactctgac aggtgcctta ttccagcgac cccacttat tgctgcagta aagaggcagc 660
tcgagtgtag gaccatctac gagagcaaaa tgattgaata cgatcctgaa agaagattag 720
gaatcttttg ggtgagttgt gaggctggca cctacattcg gacattatgt gtgcacagtg 780
atcagtcacg cgcacgaggt acgtcagatg caggagcttc ggaggggttcg ttctggagtc 840
atgagtgaag aggaccacat ggtgacaatg catgatgtgc ttgatgtcga gtggctgtat 900
gataaccaca aggatgagag ttacctgcgg cgagttgttt accctttgga aaagctgttg 960
acatctcata aacggctggt tatgaaagac agtgcagtaa atgccatctg ctatggggcc1020
aagattatgc ttccaggtgt tcttcgatat gaggacggca ttgaggtcaa tcaggagatt1080
gtggttatca ccaccaagg agaagcaatc tgcattgcta ttgcattaat gaccacagcg1140
gtcatctcta cctgcgacca tggatatagta gccaatgata agagagtgat catggagaga1200
gacacttacc ctcggaagtg gggtttaggt ccaaaggcaa gtcagaagaa gctgatgatc1260
aagcagggcc ttctggacaa gcatgggaag cccacagaca gcacacctgc cacctggaag1320
caggagtatg ttgactacag tgagtctgcc aaaaaagagg tggttgctga agtggtaaaa1380
gccccgcag tagttgcca agcagcaaaa actgcgaagg gaagcgagga gagtggaggt1440
gaaagtgacg agactcctcc agcagctcct cagttgatca agaaggaaaa gaagaagagt1500
aagaaggaca agaaggccaa agctggtctg gagagcgggg ccgagcctgg agatggggac1560
agtgatacca ccaagaagaa gaagaagaag aagaaagcaa aagaggtaga attgggttct1620
gagtagtgaa ggccacttga agctggagga gaaactaaaag ccttattgag aaaacatgtt1680
atagatcctt ttgttgctga gagagtggaa cataggtcct agacagggtg aagagttctg1740
gcacattttt gctgctactt tgagacctcg gtgatgttac ctgggtgtgg catcccatct1800
tgtcctgttt taaggatatg ggtggtgaaa gatgaaagag gcagagttaa tcccaatgac1860
ttctctgttt gagttgggaa gcctcacctt cagacccagt aactgtccgc agctgtctgc1920
tagtgggtgt cttaacatcg tagtcctagt ttgcattttt taaatcccct ctgtttaaaa1980
ggtttgtaaa acaaaaacaa aaaactaagt ctgctcagtg aaatgctgta gaaccctaaa2040
taagtggtag aagagtgtca ctgaattttg tctctgaatt cagtataact gagtttgtct2100
catgctgggt tctgggttat aggcctgatg ggcctggtag ttttccatct tgttctggcc2160
tagaggctag tcctttgcac ttctcaaaag cttgtgtaca gtgctcacct aaatccatct2220
gactacttgt tcctgtgccc tcttggttta ggctcggtt acttttaaaa aatgaaattg2280
ttcattgctg ggagaagaat gttgtaattt ttaettatta aagtcaactt gttaagtttt2340
ttatgtattc ctggtgggtt ttctgttgta tctcatgcta gcagagcaaa aattgtaaaa2400
tatttttgatt aaaaatctag ggacctttat gtccattttg aaaaaaaaaa aaa 2453

```

<210> 395
 <211> 2706
 <212> DNA
 <213> homo sapiens

<400> 395

```

gggaggaagg agactacacc tgctttgctg aaaatcaggt cgggaaggac gagatgagag 60
tcagagtcaa ggtggtgaca gcgccgccca ccatccggaa caagacttac ttggcgggtc 120
aggtgcccta tggagacgtg gtcactgtag cctgtgaggg caaaggagaa cccatgccca 180
aggtgacttg gttgtcccca accaacaagg tgatccccac ctctctgag aagtatcaga 240

```

tataccaaga	tggcactctc	cttatttcaga	aagcccagcg	ttctgacagc	ggcaactaca	300
cctgcttggt	caggaacagc	gcgggagagg	ataggaagac	ggtgtggatt	cacgtcaacg	360
tcagggccac	caagatcaac	ggtaacccca	accccatcac	cacgtgagg	gagatagcag	420
ccgggggcag	tcggaaactg	attgagtgca	aagctgaagg	catccccacc	ccgagggtgt	480
tatgggcttt	ccccgagggt	gtgggtctgc	cagctccata	ctatggaaac	cggatcactg	540
tccatggcaa	cggttccctg	gacatcagga	gtttgaggaa	gagcgactcc	gtccagctgg	600
tatgcatggc	acgcaacgag	ggaggggagg	ccaggttgat	cctgcagctc	actgtcctgg	660
agcccatgga	gaaacccatc	ttccacgacc	cgatcagcga	gaagatcacg	gccatggcgg	720
ggccacaaca	ttcagcctca	actgctctgc	cgcggggacc	ccgacaccca	gcctgggtgtg	780
ggtccttccc	aatggcacccg	atctgcagag	tggacagcag	ctgcagcgct	tctaccacaa	840
ggctgacggc	atgctacaca	ttagcgggtct	ctcctcggtg	gacgctgggg	cctaccgctg	900
cgtggcccg	aatgccgctg	gccacacgga	gaggctgggtc	tcctgaagg	tgggactgaa	960
gccagaagca	aacaagcagt	atcataacct	ggtcagcatc	atcaatggtg	agaccctgaa	1020
gctccccctg	acccctcccc	gggctgggca	gggacgtttc	tcctggacgc	tcaccaatgg	1080
catcgatctg	gagggccccc	aaacctggg	acgcgtttct	cttctggaca	atggcacctt	1140
cacggttcgt	gaggcctcgg	tgtttgacag	gggtacctat	gtatgcagga	tggagacgga	1200
gtacggccct	tcggtcacca	gcatccccgt	gatttgtgatc	gcctatcctc	cccggatcac	1260
cagcgagccc	accccggtca	tctacacccg	gcccgggaac	accgtgaaac	tgaactgcat	1320
ggctatgggg	attcccaaag	ctgacatcac	gtgggagtta	ccggataagt	cgcactctga	1380
ggcaggggtt	caggctcgtc	tgtatggaaa	cagattttctt	cacccccagg	gatcactgac	1440
catccagcat	gccacacaga	gagatgccgg	cttctacaag	tgcattggcaa	aaaacattct	1500
cggcagtgac	tccaaaacaa	cttacatcca	cgtcttctga	aatgtggatt	ccagaatgat	1560
tgcttaggaa	ctgacaacaa	agcgggggtt	ttaagggaag	ccaggttggg	gaataggagc	1620
tcttaataaa	tgtgtcacag	tgcattgggtg	cctctggtgg	gtttcaagtt	gaggttgatc	1680
ttgatctaca	attgttggga	aaagggaagca	atgcagacac	gagaaggagg	gctcagcctt	1740
gctgagacac	tttcttttgt	gtttacatca	tgccaggggc	ttcattcagg	gtgtctgtgc	1800
tctgactgca	atttttcttt	ttttgcaaat	gccactcgac	tgccttcata	agcgtccata	1860
ggatatctga	ggaacattca	tcaaaaataa	gccatagaca	tgaacaacac	ctcactacct	1920
cattgaagac	gcatcaccta	gttaacctgc	tgcagttttt	acatgataga	ctttgttcca	1980
gattgacaag	tcatctttca	gttattcctc	tgtcacttca	aaactccagc	ttgccataaa	2040
ggatttagaa	ccagagtgc	tgatataat	atatatttta	attcagagtt	acatacatat	2100
agctaccatt	ttatatgaaa	aaagaaaaac	atttcttctt	ggaactcact	ttttatataa	2160
tgttttata	atattttttt	tcctttcaaa	tcagacgatg	agactagaag	gagaaatact	2220
ttctgtctta	ttaaaattaa	taaattattg	gtcttttaca	gacttggata	cattacagca	2280
gacatggaaa	tataatttta	aaaaatttct	ctccaacctc	cttcaaattc	agtcaccact	2340
gttatattac	cttctccagg	aacctccag	tggggaaggc	tgcgatatta	gatttccctg	2400
tatgcaaagt	ttttgttgaa	agctgtgctc	agaggagggtg	agaggagagg	aaggagaaaa	2460
ctgcatcata	actttacaga	attgaatcta	gagtcctccc	cgaaaagccc	agaaacttct	2520
ctgcagtatc	tggcttgctc	atctggtcta	aggtggtctg	ttcttcccc	gccatgagtc	2580
agtttgtgcc	catgaataat	acacgacctg	ttatttccat	gactgcttta	ctgtattttt	2640
aagggtcaata	tactgtacat	ttgataataa	aataatatct	tccccaaaaa	aaaaaaaaaa	2700
aaaaag						2706

<210> 396
 <211> 2242
 <212> DNA
 <213> homo sapiens

<400> 396

caggccgggtt	ccggcgaagt	taaaccctcg	gagctggcct	cggactgctg	gggcgttacc	60
ccttcgggcca	ccccgcgtga	ccatggcagt	gtttcatgac	gaggtggaaa	tcgaggactt	120
ccaatatgac	gaggactcgg	agacgtatct	ctatccctgc	ccatgtggag	ataacttctc	180
catcaccaag	gaagatttgg	agaatgggga	agacgtggca	acgtgtccta	gctgtctctc	240
cattataaaa	gtgattttatg	acaaagatca	gtttgtgtgt	ggagaaacag	tcaccagccc	300
ttcagccaac	aaagaattag	ttaaatgctg	aagaagcctt	caggaatcca	aatcctgaac	360
atttggaatg	agcccagata	gaaatatcga	atgcaaagct	actggcttca	cagagacaac	420
cattttatgat	ttgctgttct	gtaagagtgt	ggattccttc	tatcaactgc	tgatatcatc	480
ttcaggaagc	aagtccataa	catgacatat	ctggattttg	tgetttagaac	cttaaatgtg	540
aagcattcct	aattatgcat	ctaaaattta	aagaagataa	tttcaaaaca	gtgctttctt	600
tcctttgggt	tcatcatttt	catatcttaa	accaaattac	ttcgggtatc	gacaacagca	660
tcactacact	cagtcattag	gatttcttaa	taaaaaagag	attgtatttt	tgacttgggt	720
attaagatta	ttaaaattag	cccttccttt	gaaatatgac	atcagctttg	ctgttctaaa	780
tttaaaatta	gttgcttcat	cagtaccaca	cttcagttt	ctataccaag	ccagttctct	840

```

cagttttccc attagaatgg acatgtttctg ttcagcgtgt cattttctgta atgcttcatg 900
cagagagttt ggtcatagta ttaaagagaa aatacagtgga ggtcacaatg tctccagagc 960
taaaagttag tgaacaagaa agaaagtcca aaatgaagtg atgaaagaat gaggactttt1020
cttatattct gcatattcct tggaagtcag gacaagatga aaagaaaaac atccaaaaga1080
agtgaatttg gtgacagaat gagaggagca aagcatacca gtgtagtaag tggaatgttt1140
gaatgacttt gccaggtcag agcaagtaat atttctgtat ctgagttttt gtttgtgttt1200
tgataaggct aatgaaattg cattccaggt aggggttaac gtcaaatttc catggctggt1260
agctgtgctt ttggcatatc acagtgttgt gtcactacta caaggtaaaag catctacagc1320
ggagaatgag cttgaaaatg agagacctat tgtgaataaa tatgcccatg agagcatatt1380
taataagcct ctataacatg cagccaaacc agacattcac tctgcagag aaatgttgcc1440
ctggagaaaa agagatatat aaagataggg tatcaccctt cttttgctgc agtactaagc1500
atagcaagaa attagaatca tttacattgg aaatttgaaa attcccttta tatacacaac1560
tttactgtgt ataaataaaa aatatttatt aatgcagtga tgtccgtcag gttgttttag1620
gaatggcttc tgcaattaga aaaatagctt gctagaatgt aaatgttctg ctactggtaa1680
atgtactgca cacattcatt ggacgttaaa acaagttagt agcctttttt acctgccagc1740
agcatggctg tgtgcagcca ctaggctgag acaataaatt accaaaaatt ataatgtacc1800
gagctgaaaa tgctcagtag attatgtggc atattctgga tgtgatgaga aatctcattg1860
ccatttggga cactgacatc ccagaagtaa tccacaactg ctttgcaaaa gcaaaagtga1920
tgctcagatg aacagagcag agtactcact cactatggtg gcatcagctg caaagcga1980
tgaactgtcc catgatcatg ttgatggttt tctagatact gccaacatgt tagctctttc2040
tgatgctgat gagtttcaaa cacgaacaga canctttagt gtgggtttgc taagaacata2100
gaagaacagg aagaaaagtt gccagggttt aaaaatccca gggaaaaaag aagcataaaa2160
agcattagca gtcagtgact gatgataatg cttgcaataa tggggaaatgg ttttgttttc2220
taaaacccaa aatttatttc tt

```

2242

<210> 397
 <211> 1239
 <212> DNA
 <213> homo sapiens

<400> 397

```

tagtcatcct acaaacatgt ttctgttact tcctaataatt aaaatagcca ttttggattc 60
catatttaaa gtgctcattt gagtgaatt caaattagaa agaaagatat taaaatgcgc 120
ctaacaacaaa cctctctttc agaatcccta ttccctgaat cttgggtttg aactgcttat 180
taaaggcagg cctaaactaa tttgtgagaa atgaagaagt tttagtatat aattcctttta 240
aaaaatatca attacggctg ggtgcggtgg ctacggcctg taatgccagc actttgggag 300
gccaaaggcg gtgatcacct gaggtcagga gttcaagacc agcctggcca acatggcaaa 360
accctgtctc tactaaaaag taaaaaaaat tagccgggca tgggtggctt tgctttagt 420
cccacttcag tctaagtagc tgggactaca ggcacgtgcc acnaggccca gctaattgtg 480
gtgttttgtt agagatgagg tagggccata ttgccaggc tegtcttgaa caccggggct 540
caaggaaatc gccatcttc gcctccaaa gttctgagat agcaggtgtg agtcantcat 600
gccagcctc cttgaagttt actaacaatt gggataactg agggaagaga agtgacaatt 660
ccactcagtc tattagaggt ctggatataa ggtagnccac acaataactc taacnttgac 720
ttctaaccat tctatcttat tgnatttgga ggctgtcttc tgnccagatt ttttgtggct 780
tgagatgata ttttncgaac ccttctttca ctacctttct tacccttaat gtgnccaagc 840
ttgaaacagg atttgatttc ctgagctac ttgttengcc ttctgtgctg canccaagta 900
atctggttca tctttncgtn ctcatcctat ttattttcaa gtgaaacaag acattttggg 960
ggntcaagtc tcntttgggn ntgttttgtt tttatgtata taaaaatgga ttttgntgtt1020
ccctttccna tgtnaagtan ccaacttata tggaaactca caatcataat gtaaagaaga1080
aatgaaangc ctggtgtatt gtacttcaag atgcctccct gnatgtatag aatcntcctt1140
gtaaaataaa taattgncat tgtatatcag tcttcccatc aatattaatt attaaatatt1200
ttagaatttt taaataccaa ctataaaaaa aaaaaaaa

```

1239

<210> 398
 <211> 1663
 <212> DNA
 <213> homo sapiens

<400> 398

```

gaacctgctc tctgtgttgc tggcccttg acgcagagac cgttgccctc cccacagccg 60
tttgactgaa ggctgctctg gagacctaga gtaaaacggc tgatggaagt tgtgggaccc 120

```

```

acttccattt ccttcagtc ttagaggtgg aagggagggg tctccaagtt tggagattga 180
gcagatgagg cttgggatgc cccctgcttt gacttcagcc atggatgagg agtgggatgg 240
cagcaagggtg gctcctgtgg cagtggagtt gttgccagaa acagtggcca gttgtatcgc 300
ctataagaca gggtaagggtc tgaagagctg agcctgtaat tctgctgtaa taatgatagt 360
gctcaagaag tgccttgagt tgggtgtacag tgccatggcc agcaagaatc ccagatttca 420
ggttttatta caaaatgtaa gtggtcactt ggcgattttg tagtacatgc atgagttacc 480
ttttttctct atgtctgaga actgtcagat taaaacaaga tggcaaagag atcggttagag 540
tgcacaacaa aatcactatc ccattagaca catcatcaaa agcttatttt tattcttgca 600
ctggaagaat cgtaagtcaa ctgtttcttg accatggcag tgttctggct ccaaagggtg 660
gtgattccaa ataatgggtc tgtaacact ttggcagaaa atgccagctc agatatattg 720
agatactaag gattatcttt ggacatgtac tgcagcttct tgtctctgtt ttggattact 780
ggaataccca tggggccctct caagagtgtc ggacttctag gacattaaga tgattgtcag 840
tacattaaac ttttcaatcc cattatgcaa tcttggttgt aaatgtaaac ttctaaaaat 900
atgggttaata acattcaacc tgtttattac aacttaaaag gaacttcagt gaatttggtt 960
ttatttttta caaagatttg tgaactgaat atcatgaacc atgttttgat accccttttt 1020
cacgttgtgc caacggaata ggggtgttga tatttcttca tatgttaagg agatgcttca 1080
aaatgtcaat tgctttaaac ttaaattacc tctcaagaga ccaaggtaca ttacctcat 1140
tgtgtatata atgtttaata tttgtcagag cattctccag gtttgcagtt ttatttctat 1200
aaagtatggg tattatgttg ctcagttact caaatggtag tgtattgttt atatttgtac 1260
cccaataaac atcgtctgta ctttctgttt tctgtattgt atttgtgcag gattccttag 1320
gctttatcag tgaatctctc gctttttaag atatgtacag aaaatgtcca tataaatttc 1380
cattgaagtc gaatgatact gagaagcctg taaagaggag aaaaaaacat aagctgtgtt 1440
tccccataag tttttttaa ttgtatattg tatttgtagt aatattccaa agaattgtaa 1500
ataggaaata gaagagtgat gcttatgtta agtcctaaca ctacagtaga agaattgga 1560
cagtgcacaa aaattacatt tttcccaaaa aaaaaaaaaa aaaaaaaaaa aaaaaagtgt 1620
atacgttggg atgaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa 1663

```

<210> 399

<211> 2889

<212> DNA

<213> homo sapiens

<400> 399

```

gatcaggcct gtggtccagc tcaactgccat tgagattcta gcttggggct taagaaatat 60
gaaaaacttc cagatggctt ctatcacatc cccagtcctt gttgtggagt gtggaggaga 120
aaggggtgaa tcggtgggtga tcaaaaaacct ccaactttc caagttctgt 180
tctcttcgatg aaagtgttct tgcccaaggga ggaattgtac atgccccac tgggtgatcaa 240
ggtcacgcac cacaggcagt ttgggcggaa gcctgtcgtc ggccagtgca ccatcgagcg 300
cctggaccgc tttcgtctgt acccttatgc agggaaagag gacatcgtcc cacagctcaa 360
agcctccctg ctgtctgccc caccatgccg ggacatcggt atcgaaatgg aagacaccaa 420
accattactg gcttctaagc tgacagaaaa ggaggaagaa atcgtggact ggtggagtaa 480
atgtgatgct tctcagggg aacatgaaaa atgcggacag tatattcaga aaggctattc 540
caagctcaag atatataatt gtgaactaga aaatgtagca gaatttgagg gcctgcagca 600
cttctcagat acgttcaagt tgtaccgagg caagtcggat gaaaatgaag atccttctgt 660
ggttggagag ttaagggct cctttcggat ctaccctctg ccggatgacc ccagcgtgcc 720
agccctcccc agacagtttc gggaattacc tgacagcgtc ccacaggaat gcacggttag 780
gatttacatt gttcgaggct tagagctcca gcccaggac aacaatggcc tgtgtgaccc 840
ttacataaaa ataacactgg gcaaaaaagt cattgaagac cgagatcact acattcccaa 900
cactctcaac ccagtctttg gcaggatgta cgaactgagc tgctacttac ctcaagaaaa 960
agacctgaaa atttctgtct atgattatga cacttttacc cgggatgaaa aagtaggaga 1020
aacaattatt gatctggaaa accgattcct ttcccgttt gggteccact gcggcatacc 1080
agaggagtac tgtgtttctg gagtcaatac ctggcgagat caactgagac caacacagct 1140
gcttcaaaat gtcgccagct tcaaaggctt cccacaaccc atcctttccg aagatgggag 1200
tagaatcaga tatggaggac gagactacag cttggtgaa tttgaagcca acaaaatcct 1260
gcaccagcac ctgggggccc ctgaagagcg gcttgcctct cacatcctca ggactcaggg 1320
gctggtccct gagcacgtgg aaacaaggac tttgcacagc accttccagc ccaacatttc 1380
ccagggaaaa cttcagatgt ggggtggatgt tttccccaag agtttggggc caccaggccc 1440
tcttttcaac atcacacccc ggaaagccaa gaaatactac ctgctgtgtg tcatctggaa 1500
caccaaggac gttatcttgg acgagaaaaa catcacagga gaggaaatga gtgacatcta 1560
cgtcaaaggc tggattcctg gcaatgaaga aaacaaacag aaaacagatg tccattacag 1620
atctttggat ggtgaaggga attttaactg gcgatttgtt ttcccgttg actaccttcc 1680
agccgaacaa ctctgtatcg ttgcgaaaaa agagcatttc tggagtattg accaaacgga 1740
atctcgaatc ccaccaggc tgatcattca gatatgggac aatgacaagt tttctctgga 1800

```

```

tgactacttg ggttttcctag aacttgactt gcgtcacacg atcattcctg caaaatcacc1860
agagaaatgc aggttggaca tgattccgga cctcaaagcc atgaaccccc ttaaagccaa1920
gacagcctcc ctcttttgagc agaagtcctat gaaaggatgg tggccatgct acgcagagaa1980
agatggcgcc cgcgtaaatgg ctgggaaagt ggagatgaca ttggaaatcc tcaacgagaa2040
ggaggccgac gagaggccag ccgggaaggg gcgggacgaa cccaacatga accccaagct2100
ggactttacca aatcgaccag aaacctcctt cctctgggtc accaaccat gcaagaccat2160
gaagttcatc gtgtggcgcc gctttaagtg ggtcatcatc ggcttgctgt tcttgcttat2220
cctgctgctc ttcgtggccg tgctcctcta ctctttgccc aactatttgt caatgaagat2280
tgtaaagcca aatgtgtaac aaaggcaaag gcttcatttc aagagtcac cagcaatgag2340
agaatcctgc ctctgtagac caacatccag tgtgattttg tgtctgagac cacaccccag2400
tagcagggtta cgccatgtca ccgagcccca ttgattccca gagggctcta gtccctggaaa2460
gtcaggccaa caagcaacgt ttgcatcatg ttatctctta agtattaaaa gttttatttt2520
ctaaagttaa aatcatgttt ttcaaaatat ttttcaaggt ggctgggtcc atttaaaaa2580
catcttttta tatgtgtctt cggttctaga cttcagcttt tggaaattgc taaatagaat2640
tcaaaaatct ctgcatcctg aggtgatata ctcatattt gtaatcaact gaaagagctg2700
tgcattataa aatcagttag aatagttaga acaattctta tttatgccc caaccattgc2760
tatattttgt atggatgtca taaaagtcta tttaacctct gtaatgaaac taaataaaaa2820
tgtttcacct ttaaaacata ggggggggtg tcgggggggtc gggagggggg ggggtggtgt2880
ggggtgtggt

```

2889

<210> 400

<211> 1774

<212> DNA

<213> homo sapiens

<400> 400

```

tgaaggaagt aacaaaagtg ggaaaccctt gataaaccct ctcaggatcc tcatggagaa 60
cttacctatc caggagaaat agcaaagggg aaagaactgg cccccccctg attccgatga 120
ccctccccc ggggtccctc ccacacacat gtgggaattc ccagaagata aattcaagtt 180
gcaatttcag tggggacata gcccaaacc atactactgg tgatgccac ttcttcagta 240
ttagggattc tcagtcagaa gagacccctt gtgtggcctg agtccctca ggaggaaggt 300
ggacaacaga gaaatgagag ttttgatatt ttctgaaaga ggaacatgtg ttagagatga 360
agaatcttcc aaggctcatg cagttgctta gaataatcat tactgttata tgagaaacat 420
tttagtaatt taataaaagg ataattgtta tttaaaaaac ctgacttttc cagagtaatt 480
ttgttttgca cattcatgtt tattgaagtg gactaatttc tataatgcaa atcagagtta 540
aatattaaaa attgtgtaaa tacaattgac ataggaatta cattaaaata ttaggaagaa 600
acaaggacaa atttagacct tgaatccgaa gagataaagc ttacttgact ttcaaattga 660
gagatgatga aaaccactc attcagtctt tcagaacaaa aagacagtca tctgataaga 720
gtatgacatg gatgaaatgc cctacagggg ccttgacat cttaatttc tgcgattatg 780
tgaaagaggt ggactttaca gataatggag cagaagccaa cattagttaa aggaatocca 840
acttcttccc atagaattag aaacatgtga aagtacaata aacttcttgt tcaaattacc 900
agcatcagag agcttcccat ttgcatctag acctgaatt tatatttatt gatcaagttc 960
taattttgat gtatattttg tgcataattca ccaataacag ttaaaattaa ttatgtgtta1020
tagttaatat atgcacctac cttcttccgt tagtgcata gtaaatgtgt tattttgtca1080
tttttccaaa gagagtgttg taggttttcc ctgtagttct tcttttatag cttttcttct1140
gataaaccatg acttcaggag ctttaaaact atctatcttg catttggtgc tggcggagaa1200
ctagccatca gcctcctgaa gcctgccatc attgttaatt tgaggactgg gctgtcttgg1260
ggctcagaag gttaaagaact atttgagcag atgtgtgtgg gtggcactgg attccaccca1320
actgccaaagt tagtattgtt agagatttca ttttacaaca caaaaataag cctgtgtcaa1380
agatttttaa atcatggaaa gttaaaatct agaaagacct tagagaacca gccaaaccaac1440
tctctcattt taaaagtga gattcatag cacagattac ttgcctaaga tcaccaggaa1500
acgaagacaa gaatccaaat gtacttgggg acaagaatta gtcccaaat tcagtgttct1560
tcttagtatt aaacattgcc ctttctgaca aattttggat ttcaatcttg gtatatttca1620
gtaaacctgc tgatttatta ggttactggg tagatgacat tagaatgtag atagcgtgca1680
cgctatgata gactctgcta agacatgttc ccagtgtcca gcagcaatgt agatatgtgt1740
gacagtgggtc atgtagaagt tataaagcag agta

```

1774

<210> 401

<211> 3982

<212> DNA

<213> homo sapiens

<400> 401

```

ccccagtggtg atgcattggt cttcagatgt tgaaaagaaa gcaaaaaata cctttctaact 60
taagacagaa tttttaacaa aatgagcagt aaaagtcaca tgaaccactc caaaatcagt 120
gcattttgca ttttttaaaa caaagacagc ttgttgaata ctgagaagag gagtgcagg 180
agaaggctctg tactaacaaa gccaaattcc tcaagctctt actggactca gttcagagtg 240
gtggggccatt aaccccaaca tggaattttt ccatataaat ctcaatgaat tccctttcat 300
ttgaataggc aaaccccaat ccatgcaagt gttttaaagc actgtcctgt cttaatctta 360
catgctgaaa gtcttcatgg tgatatgcac tatattcagt atacgtatgt tttcctactt 420
ctcttgtaaa actggttgcg gatccaactt cagcaatgaa ttgtgcctag tggagaacct 480
ctatagatct taaaaaatga attattcttt agcagtgtat tactcacatg ggtgcaatct 540
ttagccccag ggaggtcaat aatgtctttt aaagccagaa gtcacatttt accaatatgc 600
atztatcata attggtgctt aggctgtata ttcaagcctg ttgtcttaac attttgtata 660
aaaaagaaca acagaaatta tctgtcattt gagaagtggc ttgacaatca tttgagcttt 720
gaagcagtcg ctgtggtgta atatgaatgc tgtccttagtg gtcatagtac caagggcacg 780
tgtctccctt tggataaact gatttccctt ttagtccctt actgctaaat aagttaattt 840
tgcattttgc agaaagaaac attgattgct aaatcttttt gctgctgtgt tttggtgtt 900
tcatgtttac ttgttttata ttgactgttt taagtatgag aggcttatag tgccctccat 960
tgtaaatcca tagtcatctt tttaagctta ttgtgtttta gaaagtagct atgtgttaaa 1020
cagaggtgat ggcagccctt ccctagcaca ctgggtggaag agacccttta agaacctgac 1080
cccagtgaa gaagctgatg cacagggagc accaaaggac cttcgtaag tgataattgt 1140
cctggcctct cagccatgac cgttatgagg aaatatcccc cattcgaact taacagatgc 1200
ctcctctcca aagagaatta aaatcgtagc ttgtacagat caagagaata tactgggcag 1260
aatgaagtat gtttgtttat ttttctttta aaataaagga ttttggaact ctggagagta 1320
agatatagta tagagtttgc ctcaacacat gtgagggcca aataacctgc tagctaggca 1380
gtaataaact ctgttacaga agagaaaaag ggccgggcac agtggcttat tccgttaag 1440
ccaacactgt ggaaggccga ggcaggagga tcacttgagt ccaggagttt gaaacctacc 1500
taggcaacat ggtgaaacct tgtctctacc aaaataaaaa ttagtgggc atggtggcac 1560
gtgacctgtg tcccagctac ttgggaggct gaggtgggag cctgggaggt caaggctgca 1620
gtgagccatg atcatgccac tgcactccat cctgggtgac agcaagatct tgtaaaaaaa 1680
aaaaaaaaaa aaaccaggag tgaaaaagga aagtagaagg cagctgctgg cctagatgtt 1740
ggtttgggaa tattaggtga tccgtttgag attctggatc cagagcaatt tcttttagct 1800
ttgactttgc caaagtgtag atagccttta tccagcagta ttttaagtgg ggaatgcaac 1860
gtgaggccaa ctgaacaatt cccccgtgg ctgccagat agtcacagtc aaggttggag 1920
agtctccttc cagccagtga cctaccctaa ccttttggtc tgtaaaaactg ctctgggaat 1980
accgggaagc ccagttttct cacgtggttt ctacttctt cagactcagc ccaaattagg 2040
aagtgcagaa gcacatgatg gtgaaaaacc taggatttgg cagccttcca gaatggatg 2100
gaatctgagg gaagatttat gtttcgtttt ggaggatagc tcaagttgaa ttttctttcc 2160
agccagttac cctttcaacc tacccatact ttgtacaact cttacacaaa tacttagata 2220
tttattagat agccctgaat tcactctaact taaaaacagg gagtgtaaac tgccccaga 2280
tgttccctgg agtgggttaa gcagctggag tgaagcactc attttccata aaggttaaca 2340
agggcagctc agtgggttact caagctcaaa aggggttttt taagagcaag cattggtaa 2400
gtctgtgtat actgagttgg aagtgatttc agcacattct tttttagtgg agtgaaagtt 2460
ctgaagcccc cttttaactt cctcttggtt tttcattata attggtagcc atctcatgaa 2520
ctgtctctga ctggtgtctt tttgtggtca tgtgattgtg agcttgcttt ctgacttgca 2580
ttctctgact tatctagtgt tttaggaagt agaaaactag ttttgaaaga ttacatgaat 2640
caagcgaggg attttaagt aaagatgtat ttattctgaa gaatctaaaa gataacagat 2700
tatttgctta tgaaagaaca atatagtctg ggaatcccag aatgtcaagc caaaggtcta 2760
agaagtcac tccctcaaat actttaataa agaagtattt cgaggagata tctgtccaaa 2820
aaggtttgac tggcctccag attccagtta tttttaaaaa gcaacttacc actaaatcct 2880
tgagtctcca tagagtaaca gtaaagaaac tgatgtaaca gactctcttc tcaaaggatc 2940
tccctctgga gagactatca gcggcaggat tctccaggga agacccatcc cctagtgcac 3000
gagcttgcat cctggagact aaagattgca cttttttgta gttttttgtc caaatgcaat 3060
cccatttctg tgccctcttag catgcagtta gatttggaca aacaagattc ctaaggaatg 3120
actttattaa ctataatatg gttacagcta ttatataaat atatatctg gttatagttc 3180
taatattggag atgttgtgtg caatgctggc ctgtgggtgt ctgtgtaatg ctttaacttg 3240
tatggaggag gccaggtcca gagctgagat gtggcctgaa ccttccctgt atcgatcctt 3300
taatttagaa ctgtcaagat gtcactttct cccctctgct cttttagtgg tatctgcact 3360
atactcaaaa cagtaatttc ctgggtcacat cattaactgc taattctgta tttataaaga 3420
attttcagat ggacatgtac aaatttgaa tcaaaccatc cccagtcag atacagggca 3480
gcgtgtaggt gaccacacca gagcctcagc ctcggtcctt ctcagccgtc gggataggat 3540
ccaggcattt cttttaaatc tcagaggtag cagtaaactt ttcagtattg ctgttagcaa 3600
gtgtgtgttt gccaatgat acccattata ctaatgtgcc aagtaaatgt tcattgcaac 3660
tctgttccca ctgtgttccc acgggtgcca tgaagtgtgt gaggagcccc tcatctggag 3720
ggatgagtgc tgcgttgact actgctatca ggattgtgtt gtgtggaata ttcacttaca 3780

```

taaatttttat atgcacagta atttcccttt ttatatgtca agtaactatt tgtaaaagtt3840
 atactcacaa attattataa tgattactaa tatatttttt ccatgttttca ttgcctgaat3900
 aaaaactgtt taccactgtt aaaaaaaaaa aaaaaaaaaa aaaaaaatgg gaaaaaaaaag3960
 ctggggggggg ggcccggtag cc 3982

<210> 402
 <211> 1876
 <212> DNA
 <213> homo sapiens

<400> 402

ctcttggtatc	ccctggacca	ctgggcatac	tgcgcacact	cttccggaga	tctgggagct	60
tcgcctgcat	tagagctcct	gattgagatt	cagtgcacat	gccgtgctat	ccatcacgtc	120
cacacctctg	tgcccactct	tgaagctgtt	gggaaatatt	cagcaatgtc	cgcatacaact	180
tgcagaagaa	tataaatgac	atttcaagga	tagaagatac	ctgatttttt	ttccttttaa	240
ttttcctggg	gccaatttca	agttccaagt	tgctaataca	gcaacaattt	atgaattgaa	300
ttatcttggg	tgaaaataaa	aagatcactt	tctcagtttt	cataagtatt	atgtctcttc	360
tgagctatct	catctatctt	tggcagtcct	aattttttaa	acccatttaa	atrtttttcc	420
ttaccttttt	atttgcattg	ggatcaacca	tcgctttatt	ggctgagata	tgaacatatt	480
gttgaaaggt	aatttgagag	aaatatgaag	aactgaggag	gaaaaaaaaa	aaaaagaaaa	540
gaaccaacaa	cctcaactgc	ctactccaaa	atgttgggtc	ttttatgtta	agggaagaat	600
tccagggtat	ggccatggag	tgtacaagta	tgtgggcaga	ttttcagcaa	actcttttcc	660
cactgttttaa	ggagtttagt	gattactgcc	attcacttca	taatccagta	ggatccagtg	720
atccttacaa	gttagaaaac	ataatcttct	gcctttctcat	gatccaaacta	atgccttact	780
cttcttgaaa	ttttaacctt	tgatattttc	tgtgcctgaa	tatttggttat	gtagataaca	840
agacctcagt	gccttctcgt	ttttcacatt	ttccttttca	aatagggtct	aactcagcaa	900
ctcgccttag	gtcagcagcc	tccctgaaga	ccaaaattag	aatatccatg	acctagtttt	960
ccatgcgtgt	ttctgactct	gagctacaga	gtctgggtgaa	gtcacttctt	gggcttcatt	1020
tggcaacatc	tttatccgta	gtgggtatgg	ttgacactag	cccaatgaaa	tgaattaaag	1080
tggaccaata	gggctgagct	ctctgtgggc	tggcagtcct	ggaagccagc	tttcctgcc	1140
tctcatcaac	tgaatgaggt	cagcatgtct	attcagcttc	gtttattttc	aagaataatc	1200
acgcttttct	gaatccaaac	taatccatca	ccgggggtgt	ttagtggtct	aacattgtgt	1260
tccattttca	gctgatcagt	gggcctccaa	ggaggggctg	taaaatggag	gccattgtgt	1320
gagcctatca	gagttgctgc	aaacctgacc	ccctgctcagt	aaagcacttg	caaccgtctg	1380
ttatgtgtgt	acacatggcc	cctccccctg	ccaggagctt	tggacctaat	ccaagcatcc	1440
ctttgcccag	aaagaagatg	ggggaggagg	cagtaataaa	aagattgaag	tattttgctg	1500
gaataagttc	aaattcttct	gaactcaaac	tgaggaattt	cacctgtaaa	cctgagtcgt	1560
acagaaaagt	gcctggtata	tccaaaagct	ttttattcct	cctgtctata	ttgtgattct	1620
gcctttgggg	acttttctta	aaccttcagt	tatgattttt	ttttcataca	cttattggaa	1680
ctctgcttga	ttttggcctc	ttccagtcct	ccctgacactt	taattaccac	cctgttacct	1740
actttgactt	tttgcattta	aaacaggaca	cggggcaggg	agaaaagggg	tttagttttt	1800
aaacccgggtg	gttaccataa	cgcgggaaaa	ggtggcccat	acggggcaaa	cgtttttgaa	1860
aggttaagggt	tattttt					1876

<210> 403
 <211> 1216
 <212> DNA
 <213> homo sapiens

<400> 403

tctgtttctgt	ggacaactgt	tactgttctt	ccgtggccaa	ccatggcggc	caccagccct	60
acccccgctc	cggccacttt	ccctggacag	tgccctcgca	ggagtactca	caccgcgtcc	120
cgcccacacc	ctccgtcccc	cagtcccttc	ccagcctggc	ggtcagagac	tggcttgacg	180
cctcccagca	gcccggccac	caggatttct	acagggtgta	tgggcagccg	tccaccaaac	240
actacgtgac	gagctaaccg	cacgcaggcg	gcggggcgct	ggggaatctt	cctccccagc	300
ccccgggctc	gggagttatg	catccagaga	cctgcccttc	taccttcttc	gcctccccct	360
ttcctcatte	cattgcccc	ggtcttttcc	ttttggattt	tgttttgggt	ttggctttgt	420
ttttgatttt	tttttattat	gaatctcctg	gacgcagagg	tgacagtggg	agctggcctg	480
ggccaggagc	gcagggtggc	ctggagatgg	gaaagtgtct	gtgtcgaggc	gctgagctct	540
ctctctgttt	ctcctttttt	cctctactcc	ttccccctca	cacccccgtg	gctggaagga	600
acctcgggctt	ccctgaaaag	ttgggggtcc	cacccttctt	accccccccg	ggagggaacgc	660

```

ccagggcccc gggcttgttt ctctcttctgt tttctttttg ggcagtttga tcaactgatcg 720
agtaaggaat gaccttttaga ttgtgcgact tttgtttttg ttttttttaa ttttttttaa 780
ccaagaatga tttctcctgc ttccttctcc tcaccatctt cccagacgga gttcaaaggc 840
cacttctcaa gcagcttttg gcaccttcag cctcagagtg gaatctttta aagacaggac 900
ccctatgtcc aggaaagggg aaaaggaact ttgccaatga tagtgaccac agcaaaagca 960
ataaaataat aaaataaaaa acaatagcac agcccttgtt gaggtcagca gggaggaggg 1020
gctgcccgga gttgggtcct tgcttgatt ttgacacagc aacttctctg agtgagcact 1080
ttgtatgaat cgtggacttc ctgttctcaa ggcgcaggta tttattctgt atctgtctag 1140
agcacacacc aaaatccaac cttctaataa acatgatggc gcagtcccaa aaaaaagaaa 1200
cagaagaaga aaaggg                                     1216

```

<210> 404

<211> 271

<212> PRT

<213> homo sapiens

<400> 404

Arg 1	Pro	Arg	Ala	Gly 5	Ala	Ser	Ile	Ser	Thr 10	Leu	Ala	Gly	Leu	Ser 15	Leu
Lys	Glu	Gly	Glu 20	Asp	Gln	Lys	Glu	Ile 25	Lys	Ile	Glu	Pro	Ala 30	Gln	Ala
Val	Asp	Glu 35	Val	Glu	Pro	Leu	Pro 40	Glu	Asp	Tyr	Tyr	Thr 45	Arg	Pro	Val
Asn	Leu 50	Thr	Glu	Val	Thr	Thr 55	Leu	Gln	Gln	Arg	Leu 60	Leu	Gln	Pro	Asp
Phe 65	Gln	Pro	Val	Cys	Ala 70	Ser	Gln	Leu	Tyr	Pro 75	Arg	His	Lys	His	Leu 80
Leu	Ile	Lys	Arg	Ser 85	Leu	Arg	Cys	Arg	Lys 90	Cys	Glu	His	Asn	Leu 95	Ser
Lys	Pro	Glu	Phe 100	Asn	Pro	Thr	Ser	Ile 105	Lys	Phe	Lys	Ile	Gln 110	Leu	Val
Ala	Val	Asn 115	Tyr	Ile	Pro	Glu	Val 120	Arg	Ile	Met	Ser	Ile 125	Pro	Asn	Leu
Arg	Tyr 130	Met	Lys	Glu	Ser	Gln 135	Val	Leu	Leu	Thr	Leu 140	Thr	Asn	Pro	Val
Glu 145	Asn	Leu	Thr	His	Val 150	Thr	Leu	Phe	Glu	Cys 155	Glu	Glu	Gly	Asp	Pro 160
Asp	Asp	Ile	Asn	Ser 165	Thr	Ala	Lys	Val	Val 170	Val	Pro	Pro	Lys	Glu 175	Leu
Val	Leu	Ala	Gly 180	Lys	Asp	Ala	Ala	Ala 185	Glu	Tyr	Asp	Glu	Leu 190	Ala	Glu

Pro	Gln	Asp 195	Phe	Gln	Asp	Asp	Pro 200	Asp	Ile	Ile	Ala	Phe 205	Arg	Lys	Ala
Asn	Lys 210	Val	Gly	Ile	Phe	Ile 215	Lys	Val	Thr	Pro	Gln 220	Arg	Glu	Glu	Gly
Glu 225	Val	Thr	Val	Cys	Phe 230	Lys	Met	Lys	His	Asp 235	Phe	Lys	Asn	Leu	Ala 240
Ala	Pro	Ile	Arg	Pro 245	Ile	Glu	Glu	Ser	Asp 250	Gln	Gly	Thr	Glu	Val 255	Ile
Trp	Leu	Thr	Gln 260	His	Val	Glu	Leu	Ser 265	Leu	Gly	Pro	Leu	Leu 270	Pro	

<210> 405

<211> 133

<212> PRT

<213> homo sapiens

<400> 405

Asp 1	Leu	Lys	Gln	Asp 5	Gln	Gly	Lys	Gln	Lys 10	Ile	Cys	Ile	Phe	Leu 15	Lys
Ser	Leu	Gly	His 20	Leu	Leu	Thr	Ile	Leu 25	Leu	Gln	Lys	Thr	Arg 30	Cys	Ser
Trp	Trp	Ser 35	Thr	Leu	Ser	Ser	Phe 40	Ile	Leu	Glu	Asn	Ile 45	Ile	Glu	Ile
Lys	Val 50	Ser	Asn	Pro	Thr	Pro 55	Gly	Tyr	Gln	Val	Lys 60	Thr	Ala	Ser	Leu
Leu 65	Leu	Gly	Gln	Asn	Cys 70	Gly	Leu	Leu	Ala	Glu 75	Leu	Phe	Tyr	Gly	Leu 80
Gln	Ser	Lys	Trp	Ser 85	Tyr	Leu	Thr	His	His 90	Met	Thr	Lys	Val	Leu 95	Asn
Leu	Val	Arg	Gly 100	Lys	Val	Leu	Asn	Ile 105	Gln	Phe	Trp	Ile	Gln 110	Glu	Ile
Ile	Ile	Val 115	Asn	Phe	Pro	Phe	Lys 120	Ser	Met	Glu	Arg	Met 125	Leu	Val	Glu
Asn	Ile 130	Leu	Lys	Ile											

<210> 406

<211> 95

<212> PRT

<213> homo sapiens

<400> 406

Arg 1	Gly	Pro	Gly	His 5	Leu	Leu	Lys	Pro	Asn 10	Gly	Gly	Pro	Pro	Met 15	Lys
Leu	Gly	Tyr	Gly 20	Arg	Asn	Leu	Asp	Ile 25	Ser	Pro	Arg	Leu	Pro 30	Leu	Asn
Arg	Glu	Thr 35	Val	Lys	Arg	Ser	Ile 40	Arg	Phe	His	Arg	Phe 45	Trp	Pro	Leu
Ile	Pro 50	Asn	Ser	Phe	Pro	His 55	Asn	Ser	Val	Phe	Leu 60	Val	Ser	Met	Lys
Cys 65	Leu	Glu	Ser	His	Arg 70	Lys	Pro	Val	Lys	Ile 75	Phe	Leu	Lys	Lys	Lys 80
Lys	Pro	Gln	Lys	Thr 85	Asp	His	Leu	Ser	Ile 90	Gln	Trp	Thr	Ser	Ile 95	

<210> 407

<211> 55

<212> PRT

<213> homo sapiens

<400> 407

Tyr 1	Leu	Ser	Leu	Cys 5	Pro	Cys	Trp	Pro	Gly 10	Asn	Phe	Phe	Gln	Trp 15	Cys
Leu	Leu	Glu	Glu 20	Val	Phe	Ser	Ser	Cys 25	His	Phe	Lys	Lys	Ile 30	Lys	Leu
Glu	Ile	Glu 35	Tyr	Gly	Trp	His	Asp 40	Cys	Thr	Leu	Leu	Val 45	Leu	Leu	Phe
Phe	Tyr 50	Ser	Ser	Val	Pro	Leu 55									

<210> 408

<211> 127

<212> PRT

<213> homo sapiens

<400> 408

Leu 1	Gln	Glu	Ala	Pro 5	Cys	Gly	Glu	His	Gly 10	Arg	His	Leu	His	Lys 15	Ser
Ala	Met	Arg	Arg 20	Asp	Thr	Glu	Ser	Glu 25	Leu	His	His	Gln	Arg 30	Gln	Val
Gln	Gly	Ala 35	Glu	Thr	Val	Gly	Ser 40	Gly	Gln	Gly	Ser	Ala 45	Ala	Phe	Ser
Gly	Pro	Ser	Pro	Tyr	Ala	Arg	Gly	Pro	Gly	Pro	Asp	Leu	Pro	Leu	Leu

50

55

185

60

Gly 65	Gly	Gln	His	Leu	Ser 70	Ile	Arg	Arg	Trp	Phe 75	Lys	Cys	Val	Thr	Met 80
-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------

Ser	Gln	Cys	Val	Leu 85	Glu	Leu	Pro	Phe	Ser 90	Asn	Ala	Asn	Leu	Pro 95	Ser
-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Leu	His	Ile	Ser 100	Pro	His	Pro	Trp	Thr 105	Arg	Phe	Cys	Val	Ser 110	Glu	Ser
-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----

Gly	Asn	Leu 115	Leu	Lys	Arg	Gly	Gly 120	Ser	Thr	Pro	Gly	Leu 125	Leu	Val
-----	-----	------------	-----	-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----

<210> 409

<211> 95

<212> PRT

<213> homo sapiens

<400> 409

Lys 1	Gly	Val	Gly	Leu 5	Leu	Ile	Met	Gly	Gly 10	Gln	Gly	Gln	Val	Leu 15	Gly
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

His	Arg	Glu	Arg 20	Val	Arg	Arg	Met	Leu 25	Gln	Thr	Pro	Ala	His 30	Cys	Pro
-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----

Arg	Ser	Pro 35	Leu	Pro	Ala	Pro	Ala 40	Ser	Asp	Gly	Ala	Ala 45	Leu	Ile	Pro
-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----

Cys	Leu 50	Ser	Ser	Leu	Gln	Ile 55	Tyr	Glu	Gly	Ala	Tyr 60	His	Val	Leu	His
-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----

Lys 65	Glu	Leu	Pro	Glu	Val 70	Thr	Asn	Ser	Val	Phe 75	His	Glu	Ile	Asn	Met 80
-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------

Trp	Val	Ser	Gln	Arg 85	Thr	Ala	Thr	Ala	Gly 90	Thr	Ala	Ser	Pro	Pro 95
-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------

<210> 410

<211> 296

<212> PRT

<213> homo sapiens

<400> 410

Val 1	Val	Arg	Leu	Ala 5	Pro	Thr	Phe	Gly	His 10	Tyr	Val	Cys	Thr	Val 15	Ile
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Ser	His	Ala	His 20	Glu	Val	Arg	Gln	Met 25	Gln	Glu	Leu	Arg	Arg 30	Val	Arg
-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----

Ser	Gly	Val 35	Met	Ser	Glu	Lys	Asp 40	His	Met	Val	Thr	Met 45	His	Asp	Val
-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----

Leu	Asp	Ala	Gln	Trp	Leu	Tyr	186 Asp	Asn	His	Lys	Asp	Glu	Ser	Tyr	Leu
	50					55					60				
Arg	Arg	Val	Val	Tyr	Pro	Leu	Glu	Lys	Leu	Leu	Thr	Ser	His	Lys	Arg
65					70					75					80
Leu	Val	Met	Lys	Asp	Ser	Ala	Val	Asn	Ala	Ile	Cys	Tyr	Gly	Ala	Lys
				85					90					95	
Ile	Met	Leu	Pro	Gly	Val	Leu	Arg	Tyr	Glu	Asp	Gly	Ile	Glu	Val	Asn
			100					105					110		
Gln	Glu	Ile	Val	Val	Ile	Thr	Thr	Lys	Gly	Glu	Ala	Ile	Cys	Met	Ala
		115					120					125			
Ile	Ala	Leu	Met	Thr	Thr	Ala	Val	Ile	Ser	Thr	Cys	Asp	His	Gly	Ile
	130					135					140				
Val	Ala	Lys	Ile	Lys	Arg	Val	Ile	Met	Glu	Arg	Asp	Thr	Tyr	Pro	Arg
145					150					155					160
Lys	Trp	Gly	Leu	Gly	Pro	Lys	Ala	Ser	Gln	Lys	Lys	Leu	Met	Ile	Lys
				165					170					175	
Gln	Gly	Leu	Leu	Asp	Lys	His	Gly	Lys	Pro	Thr	Asp	Ser	Thr	Pro	Ala
			180					185					190		
Thr	Trp	Lys	Gln	Glu	Tyr	Val	Asp	Tyr	Ser	Glu	Ser	Ala	Lys	Lys	Glu
		195					200					205			
Val	Val	Ala	Glu	Val	Val	Lys	Ala	Pro	Gln	Val	Val	Ala	Glu	Ala	Ala
	210					215					220				
Lys	Thr	Ala	Lys	Gly	Ser	Glu	Glu	Ser	Glu	Ser	Glu	Ser	Asp	Glu	Thr
225					230					235					240
Pro	Pro	Ala	Ala	Pro	Gln	Leu	Ile	Lys	Lys	Glu	Lys	Lys	Lys	Ser	Lys
				245					250					255	
Lys	Asp	Lys	Lys	Ala	Lys	Ala	Gly	Leu	Glu	Ser	Gly	Ala	Glu	Pro	Gly
			260					265					270		
Asp	Gly	Asp	Ser	Asp	Thr	Thr	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Ala
		275					280					285			
Lys	Glu	Val	Glu	Leu	Val	Ser	Glu								
	290					295									

<210> 411
<211> 280

<212> PRT

<213> homo sapiens

<400> 411

Arg 1	Asp	Gln	Gly	Gly 5	Gly	Ser	Leu	Arg	Ser 10	Phe	Pro	Arg	Leu	Trp 15	Thr
Gly	Arg	His	Asp 20	Ala	Val	Gln	Gly	Asn 25	Met	Ala	Asp	Ala	Glu 30	Val	Ile
Ile	Leu	Pro 35	Lys	Lys	His	Lys	Lys 40	Lys	Lys	Glu	Arg	Lys 45	Ser	Leu	Pro
Glu	Glu 50	Asp	Val	Ala	Glu	Ile 55	Gln	His	Ala	Glu	Glu 60	Phe	Phe	Ile	Lys
Pro 65	Glu	Ser	Lys	Val	Ala 70	Lys	Leu	Asp	Thr	Ser 75	Gln	Trp	Pro	Leu	Leu 80
Leu	Lys	Asn	Phe	Asp 85	Lys	Leu	Asn	Val	Arg 90	Thr	Thr	His	Tyr	Thr 95	Pro
Leu	Ala	Cys	Gly 100	Ser	Asn	Pro	Leu	Lys 105	Arg	Glu	Ile	Gly	Asp 110	Tyr	Ile
Arg	Thr	Gly 115	Phe	Ile	Asn	Leu	Asp 120	Lys	Pro	Ser	Asn	Pro 125	Ser	Ser	His
Glu	Val 130	Val	Ala	Trp	Ile	Arg 135	Arg	Ile	Leu	Arg	Val 140	Glu	Lys	Thr	Gly
His 145	Ser	Gly	Thr	Leu	Asp 150	Pro	Lys	Val	Thr	Gly 155	Cys	Leu	Ile	Val	Cys 160
Ile	Glu	Arg	Ala	Thr 165	Arg	Leu	Val	Lys	Ser 170	Gln	Gln	Ser	Ala	Gly 175	Lys
Glu	Tyr	Val	Gly 180	Ile	Val	Arg	Leu	His 185	Asn	Ala	Ile	Glu	Gly 190	Gly	Thr
Gln	Leu	Ser 195	Arg	Ala	Leu	Glu	Thr 200	Leu	Thr	Gly	Ala	Leu 205	Phe	Gln	Arg
Pro	Pro 210	Leu	Ile	Ala	Ala	Val 215	Lys	Arg	Gln	Leu	Arg 220	Val	Arg	Thr	Ile
Tyr 225	Glu	Ser	Lys	Met	Ile 230	Glu	Tyr	Asp	Pro	Glu 235	Arg	Arg	Leu	Gly	Ile 240
Phe	Trp	Val	Ser	Cys	Glu	Ala	Gly	Thr	Tyr	Ile	Arg	Thr	Leu	Cys	Val

188															
245								250				255			
His	Ser	Asp	Gln 260	Ser	Arg	Ala	Arg	Gly 265	Thr	Ser	Asp	Ala	Gly 270	Ala	Ser
Glu	Gly	Ser 275	Phe	Trp	Ser	His	Glu 280								
<210> 412															
<211> 360															
<212> PRT															
<213> homo sapiens															
<400> 412															
Arg 1	His	Pro	His	Pro 5	Glu	Gly	Val	Met	Gly 10	Phe	Ser	Arg	Gly	Cys 15	Gly
Ser	Ala	Ser	Ser 20	Ile	Leu	Trp	Lys	Pro 25	Asp	His	Cys	Pro	Trp 30	Gln	Arg
Phe	Pro	Gly 35	His	Gln	Glu	Phe	Glu 40	Glu	Glu	Arg	Leu	Arg 45	Pro	Ala	Gly
Met	His 50	Gly	Thr	Gln	Arg	Gly 55	Arg	Gly	Gly	Gln	Val 60	Asp	Pro	Ala	Ala
His 65	Cys	Pro	Gly	Ala	His 70	Gly	Glu	Thr	His	Leu 75	Pro	Arg	Pro	Asp	Gln 80
Arg	Glu	Asp	His	Gly 85	His	Gly	Gly	Ala	Thr 90	Thr	Phe	Ser	Leu	Asn 95	Cys
Ser	Ala	Ala	Gly 100	Thr	Pro	Thr	Pro	Ser 105	Leu	Val	Trp	Val	Leu 110	Pro	Asn
Gly	Thr	Asp 115	Leu	Gln	Ser	Gly	Gln 120	Gln	Leu	Gln	Arg	Phe 125	Tyr	His	Lys
Ala	Asp 130	Gly	Met	Leu	His	Ile 135	Ser	Gly	Leu	Ser	Ser 140	Val	Asp	Ala	Gly
Ala 145	Tyr	Arg	Cys	Val	Ala 150	Arg	Asn	Ala	Ala	Gly 155	His	Thr	Glu	Arg	Leu 160
Val	Ser	Leu	Lys	Val 165	Gly	Leu	Lys	Pro	Glu 170	Ala	Asn	Lys	Gln	Tyr 175	His
Asn	Leu	Val	Ser 180	Ile	Ile	Asn	Gly	Glu 185	Thr	Leu	Lys	Leu	Pro 190	Cys	Thr
Pro	Pro	Gly	Ala	Gly	Gln	Gly	Arg	Phe	Ser	Trp	Thr	Leu	Pro	Asn	Gly

	195			189 200			205									
Met	His 210	Leu	Glu	Gly	Pro	Gln 215	Thr	Leu	Gly	Arg	Val 220	Ser	Leu	Leu	Asp	
Asn 225	Gly	Thr	Leu	Thr	Val 230	Arg	Glu	Ala	Ser	Val 235	Phe	Asp	Arg	Gly	Thr 240	
Tyr	Val	Cys	Arg	Met 245	Glu	Thr	Glu	Tyr	Gly 250	Pro	Ser	Val	Thr	Ser 255	Ile	
Pro	Val	Ile	Val 260	Ile	Ala	Tyr	Pro	Pro 265	Arg	Ile	Thr	Ser	Glu 270	Pro	Thr	
Pro	Val	Ile 275	Tyr	Thr	Arg	Pro	Gly 280	Asn	Thr	Val	Lys	Leu 285	Asn	Cys	Met	
Ala	Met 290	Gly	Ile	Pro	Lys	Ala 295	Asp	Ile	Thr	Trp	Glu 300	Leu	Pro	Asp	Lys	
Ser 305	His	Leu	Lys	Ala	Gly 310	Val	Gln	Ala	Arg	Leu 315	Tyr	Gly	Asn	Arg	Phe 320	
Leu	His	Pro	Gln	Gly 325	Ser	Leu	Thr	Ile	Gln 330	His	Ala	Thr	Gln	Arg 335	Asp	
Ala	Gly	Phe	Tyr 340	Lys	Cys	Met	Ala	Lys 345	Asn	Ile	Leu	Gly	Ser 350	Asp	Ser	
Lys	Thr	Thr 355	Tyr	Ile	His	Val	Phe 360									
<210> 413																
<211> 314																
<212> PRT																
<213> homo sapiens																
<400> 413																
Glu 1	Glu	Gly	Asp	Tyr 5	Thr	Cys	Phe	Ala	Glu 10	Asn	Gln	Val	Gly	Lys 15	Asp	
Glu	Met	Arg	Val 20	Arg	Val	Lys	Val 25	Val	Thr	Ala	Pro	Ala	Thr 30	Ile	Arg	
Asn	Lys	Thr 35	Tyr	Leu	Ala	Val	Gln 40	Val	Pro	Tyr	Gly	Asp 45	Val	Val	Thr	
Val	Ala 50	Cys	Glu	Ala	Lys	Gly 55	Glu	Pro	Met	Pro	Lys 60	Val	Thr	Trp	Leu	
Ser	Pro	Thr	Asn	Lys	Val	Ile	Pro	Thr	Ser	Ser	Glu	Lys	Tyr	Gln	Ile	

65						70	190					75					80				
Tyr	Gln	Asp	Gly	Thr	Leu	Leu	Ile	Gln	Lys	Ala	Gln	Arg	Ser	Asp	Ser						
				85					90					95							
Gly	Asn	Tyr	Thr	Cys	Leu	Val	Arg	Asn	Ser	Ala	Gly	Glu	Asp	Arg	Lys						
			100					105					110								
Thr	Val	Trp	Ile	His	Val	Asn	Val	Gln	Pro	Pro	Lys	Ile	Asn	Gly	Asn						
		115					120					125									
Pro	Asn	Pro	Ile	Thr	Thr	Val	Arg	Glu	Ile	Ala	Ala	Gly	Gly	Ser	Arg						
	130					135					140										
Lys	Leu	Ile	Glu	Cys	Lys	Ala	Glu	Gly	Ile	Pro	Thr	Pro	Arg	Val	Leu						
145					150					155					160						
Trp	Ala	Phe	Pro	Glu	Gly	Val	Val	Leu	Pro	Ala	Pro	Tyr	Tyr	Gly	Asn						
				165					170					175							
Arg	Ile	Thr	Val	His	Gly	Asn	Gly	Ser	Leu	Asp	Ile	Arg	Ser	Leu	Arg						
			180					185					190								
Lys	Ser	Asp	Ser	Val	Gln	Leu	Val	Cys	Met	Ala	Arg	Asn	Glu	Gly	Gly						
		195					200					205									
Glu	Ala	Arg	Leu	Ile	Leu	Gln	Leu	Thr	Val	Leu	Glu	Pro	Met	Glu	Lys						
	210					215					220										
Pro	Ile	Phe	His	Asp	Pro	Ile	Ser	Glu	Lys	Ile	Thr	Ala	Met	Ala	Gly						
225					230					235					240						
Pro	Gln	His	Ser	Ala	Ser	Thr	Ala	Leu	Pro	Arg	Gly	Pro	Arg	His	Pro						
				245					250					255							
Ala	Trp	Cys	Gly	Ser	Phe	Pro	Met	Ala	Pro	Ile	Cys	Arg	Val	Asp	Ser						
			260					265					270								
Ser	Cys	Ser	Ala	Ser	Thr	Thr	Arg	Leu	Thr	Ala	Cys	Tyr	Thr	Leu	Ala						
		275					280					285									
Val	Ser	Pro	Arg	Trp	Thr	Leu	Gly	Pro	Thr	Ala	Ala	Trp	Pro	Ala	Met						
	290					295					300										
Pro	Leu	Ala	Thr	Arg	Arg	Gly	Trp	Ser	Pro												
305					310																

<210> 414
 <211> 109
 <212> PRT

<213> homo sapiens

<400> 414

Arg 1	Pro	Val	Pro	Ala 5	Lys	Leu	Asn	Pro	Arg 10	Ser	Trp	Pro	Arg	Thr 15	Ala
Gly	Ala	Leu	Pro 20	Leu	Arg	Pro	Pro	Pro 25	Leu	Thr	Met	Ala	Val 30	Phe	His
Asp	Glu	Val 35	Glu	Ile	Glu	Asp	Phe 40	Gln	Tyr	Asp	Glu	Asp 45	Ser	Glu	Thr
Tyr	Phe 50	Tyr	Pro	Cys	Pro	Cys 55	Gly	Asp	Asn	Phe	Ser 60	Ile	Thr	Lys	Glu
Asp 65	Leu	Glu	Asn	Gly	Glu 70	Asp	Val	Ala	Thr	Cys 75	Pro	Ser	Cys	Ser	Leu 80
Ile	Ile	Lys	Val	Ile 85	Tyr	Asp	Lys	Asp	Gln 90	Phe	Val	Cys	Gly	Glu 95	Thr
Val	Pro	Ala	Pro 100	Ser	Ala	Asn	Lys	Glu 105	Leu	Val	Lys	Cys			

<210> 415

<211> 103

<212> PRT

<213> homo sapiens

<400> 415

Tyr 1	Ala	Lys	Ser	Thr 5	Ala	Thr	Ser	His	Gly 10	Asn	Leu	Thr	Leu	Thr 15	Pro
Thr	Trp	Asn	Ala 20	Ile	Ser	Leu	Ala	Leu 25	Ser	Lys	His	Lys	Gln 30	Lys	Leu
Arg	Tyr	Arg 35	Asn	Ile	Thr	Cys	Ser 40	Asp	Leu	Ala	Lys	Ser 45	Phe	Lys	His
Ser	Thr 50	Tyr	Tyr	Thr	Gly	Met 55	Leu	Cys	Ser	Ser	His 60	Ser	Val	Thr	Asn
Phe 65	Thr	Ser	Phe	Gly	Cys 70	Phe	Ser	Phe	His	Leu 75	Val	Leu	Thr	Ser	Lys 80
Glu	Tyr	Ala	Glu	Tyr 85	Lys	Lys	Ser	Pro	His 90	Ser	Phe	Ile	Thr	Ser 95	Phe
Trp	Thr	Phe	Phe 100	Leu	Val	His									

<210> 416

<211> 144

<212> PRT
 <213> homo sapiens

<400> 416

Tyr 1	Thr	Met	Xxx	Ile 5	Ile	Tyr	Phe	Thr	Arg 10	Xxx	Ile	Leu	Tyr	Xxx 15	Gln
Gly	Gly	Ile	Leu 20	Lys	Tyr	Asn	Thr	Pro 25	Gly	Xxx	Ser	Phe	Leu 30	Leu	Tyr
Ile	Met	Ile 35	Val	Ser	Phe	His	Ile 40	Ser	Trp	Xxx	Leu	Xxx 45	Xxx	Gly	Lys
Gly	Thr 50	Xxx	Lys	Ser	Ile	Phe 55	Ile	Tyr	Ile	Lys	Thr 60	Lys	Xxx	Xxx	Gln
Xxx 65	Arg	Leu	Xxx	Pro	Pro 70	Lys	Cys	Leu	Val	Ser 75	Leu	Glu	Asn	Asn	Met 80
Asn	Glu	Xxx	Xxx	Lys 85	Met	Asn	Gln	Ile	Thr 90	Trp	Xxx	Thr	His	Arg 95	Arg
Xxx	Asn	Lys	Xxx 100	Ala	Gln	Glu	Ile	Lys 105	Ser	Cys	Phe	Lys	Leu 110	Gly	His
Ile	Lys	Gly 115	Lys	Lys	Gly	Ser	Glu 120	Arg	Arg	Val	Arg	Lys 125	Ile	Ser	Ser
Gln	Ala 130	Thr	Lys	Asn	Leu	Xxx 135	Arg	Arg	Gln	Pro	Pro 140	Asn	Xxx	Ile	Arg

<210> 417
 <211> 74
 <212> PRT
 <213> homo sapiens

<400> 417

Leu 1	Ile	Leu	Met	Gly 5	Arg	Leu	Ile	Tyr	Asn 10	Xxx	Asn	Tyr	Leu	Phe 15	Tyr
Lys	Xxx	Asp	Ser 20	Ile	His	Xxx	Gly	Arg 25	His	Leu	Glu	Val	Gln 30	Tyr	Thr
Arg	Xxx	Phe 35	Ile	Ser	Ser	Leu	His 40	Tyr	Asp	Cys	Glu	Phe 45	Pro	Tyr	Lys
Leu	Xxx 50	Thr	Xxx	His	Xxx	Lys 55	Gly	Asn	Xxx	Lys	Ile 60	His	Phe	Tyr	Ile
His 65	Lys	Asn	Lys	Thr	Xxx 70	Pro	Xxx	Glu	Thr						

<210> 418
 <211> 121
 <212> PRT
 <213> homo sapiens

<400> 418

Tyr 1	Pro	Phe	Phe	Thr 5	Leu	Cys	Gln	Arg	Asn 10	Arg	Val	Phe	Asp	Ile 15	Ser
Ser	Tyr	Val	Lys 20	Glu	Met	Leu	Gln	Asn 25	Val	Asn	Cys	Phe	Lys 30	Leu	Lys
Leu	Pro	Leu 35	Lys	Arg	Pro	Arg	Tyr 40	Ile	Tyr	Leu	Ile	Val 45	Tyr	Ile	Met
Phe	Asn 50	Ile	Cys	Gln	Ser	Ile 55	Leu	Gln	Val	Cys	Ser 60	Phe	Ile	Ser	Ile
Lys 65	Tyr	Gly	Tyr	Tyr	Val 70	Ala	Gln	Leu	Leu	Lys 75	Trp	Tyr	Cys	Ile	Val 80
Tyr	Ile	Cys	Thr	Pro 85	Asn	Asn	Ile	Val	Cys 90	Thr	Phe	Cys	Phe	Leu 95	Tyr
Cys	Ile	Cys	Ala 100	Gly	Phe	Phe	Arg	Leu 105	Tyr	Gln	Cys	Asn	Leu 110	Cys	Leu
Leu	Arg	Tyr 115	Val	Gln	Lys	Met	Ser 120	Ile							

<210> 419
 <211> 114
 <212> PRT
 <213> homo sapiens

<400> 419

Phe 1	Phe	Phe	Phe	Phe 5	Phe	Phe	Phe	Phe	Ser 10	Phe	Gln	Arg	Ile	His 15	Phe
Phe	Phe	Phe	Phe 20	Phe	Phe	Phe	Phe	Phe 25	Gly	Lys	Asn	Val	Ile 30	Tyr	Leu
His	Cys	Phe 35	His	Ser	Ser	Thr	Val 40	Val	Leu	Gly	Leu	Asn 45	Ile	Ser	Ile
Thr	Leu 50	Leu	Phe	Pro	Ile	Tyr 55	Ile	Leu	Leu	Glu	Tyr 60	Tyr	Tyr	Lys	Tyr
Asn 65	Ile	Gln	Phe	Lys	Lys 70	Thr	Tyr	Gly	Glu	Thr 75	Gln	Leu	Met	Phe	Phe 80
Ser	Pro	Leu	Tyr	Arg 85	Leu	Leu	Ser	Ile	Ile 90	Arg	Leu	Gln	Trp	Lys 95	Phe

Ile Trp Thr Phe Ser Val His Ile Leu Lys Gly Arg Asp Tyr Thr Asp
100 105 110

Lys Ala

<210> 420

<211> 765

<212> PRT

<213> homo sapiens

<400> 420

Ile	Arg	Pro	Val	Val	Gln	Leu	Thr	Ala	Ile	Glu	Ile	Leu	Ala	Trp	Gly
1				5					10					15	
Leu	Arg	Asn	Met	Lys	Asn	Phe	Gln	Met	Ala	Ser	Ile	Thr	Ser	Pro	Ser
			20					25					30		
Leu	Val	Val	Glu	Cys	Gly	Gly	Glu	Arg	Val	Glu	Ser	Val	Val	Ile	Lys
		35					40					45			
Asn	Leu	Lys	Lys	Thr	Pro	Asn	Phe	Pro	Ser	Ser	Val	Leu	Phe	Met	Lys
	50					55					60				
Val	Phe	Leu	Pro	Lys	Glu	Glu	Leu	Tyr	Met	Pro	Pro	Leu	Val	Ile	Lys
65					70					75					80
Val	Ile	Asp	His	Arg	Gln	Phe	Gly	Arg	Lys	Pro	Val	Val	Gly	Gln	Cys
				85					90					95	
Thr	Ile	Glu	Arg	Leu	Asp	Arg	Phe	Arg	Cys	Asp	Pro	Tyr	Ala	Gly	Lys
			100					105					110		
Glu	Asp	Ile	Val	Pro	Gln	Leu	Lys	Ala	Ser	Leu	Leu	Ser	Ala	Pro	Pro
		115					120					125			
Cys	Arg	Asp	Ile	Val	Ile	Glu	Met	Glu	Asp	Thr	Lys	Pro	Leu	Leu	Ala
	130					135					140				
Ser	Lys	Leu	Thr	Glu	Lys	Glu	Glu	Glu	Ile	Val	Asp	Trp	Trp	Ser	Lys
145					150					155					160
Phe	Asp	Ala	Ser	Ser	Gly	Glu	His	Glu	Lys	Cys	Gly	Gln	Tyr	Ile	Gln
				165					170					175	
Lys	Gly	Tyr	Ser	Lys	Leu	Lys	Ile	Tyr	Asn	Cys	Glu	Leu	Glu	Asn	Val
			180					185					190		
Ala	Glu	Phe	Glu	Gly	Leu	Thr	Asp	Phe	Ser	Asp	Thr	Phe	Lys	Leu	Tyr
		195					200					205			

Arg	Gly 210	Lys	Ser	Asp	Glu	Asn 215	Glu	Asp	Pro	Ser	Val 220	Val	Gly	Glu	Phe
Lys 225	Gly	Ser	Phe	Arg	Ile 230	Tyr	Pro	Leu	Pro	Asp 235	Asp	Pro	Ser	Val	Pro 240
Ala	Pro	Pro	Arg	Gln 245	Phe	Arg	Glu	Leu	Pro 250	Asp	Ser	Val	Pro	Gln 255	Glu
Cys	Thr	Val	Arg 260	Ile	Tyr	Ile	Val	Arg 265	Gly	Leu	Glu	Leu	Gln 270	Pro	Gln
Asp	Asn	Asn 275	Gly	Leu	Cys	Asp	Pro 280	Tyr	Ile	Lys	Ile	Thr 285	Leu	Gly	Lys
Lys	Val 290	Ile	Glu	Asp	Arg	Asp 295	His	Tyr	Ile	Pro	Asn 300	Thr	Leu	Asn	Pro
Val 305	Phe	Gly	Arg	Met	Tyr 310	Glu	Leu	Ser	Cys	Tyr 315	Leu	Pro	Gln	Glu	Lys 320
Asp	Leu	Lys	Ile	Ser 325	Val	Tyr	Asp	Tyr	Asp 330	Thr	Phe	Thr	Arg	Asp 335	Glu
Lys	Val	Gly	Glu 340	Thr	Ile	Ile	Asp	Leu 345	Glu	Asn	Arg	Phe	Leu 350	Ser	Arg
Phe	Gly	Ser 355	His	Cys	Gly	Ile	Pro 360	Glu	Glu	Tyr	Cys	Val 365	Ser	Gly	Val
Asn	Thr 370	Trp	Arg	Asp	Gln	Leu 375	Arg	Pro	Thr	Gln	Leu 380	Leu	Gln	Asn	Val
Ala 385	Arg	Phe	Lys	Gly	Phe 390	Pro	Gln	Pro	Ile	Leu 395	Ser	Glu	Asp	Gly	Ser 400
Arg	Ile	Arg	Tyr	Gly 405	Gly	Arg	Asp	Tyr	Ser 410	Leu	Asp	Glu	Phe	Glu 415	Ala
Asn	Lys	Ile	Leu 420	His	Gln	His	Leu	Gly 425	Ala	Pro	Glu	Glu	Arg 430	Leu	Ala
Leu	His	Ile 435	Leu	Arg	Thr	Gln	Gly 440	Leu	Val	Pro	Glu	His 445	Val	Glu	Thr
Arg	Thr 450	Leu	His	Ser	Thr	Phe 455	Gln	Pro	Asn	Ile	Ser 460	Gln	Gly	Lys	Leu

196

Gln 465	Met	Trp	Val	Asp	Val 470	Phe	Pro	Lys	Ser	Leu 475	Gly	Pro	Pro	Gly	Pro 480
Pro	Phe	Asn	Ile	Thr 485	Pro	Arg	Lys	Ala	Lys 490	Lys	Tyr	Tyr	Leu	Arg 495	Val
Ile	Ile	Trp	Asn 500	Thr	Lys	Asp	Val	Ile 505	Leu	Asp	Glu	Lys	Ser 510	Ile	Thr
Gly	Glu	Glu 515	Met	Ser	Asp	Ile	Tyr 520	Val	Lys	Gly	Trp	Ile 525	Pro	Gly	Asn
Glu	Glu 530	Asn	Lys	Gln	Lys	Thr 535	Asp	Val	His	Tyr	Arg 540	Ser	Leu	Asp	Gly
Glu 545	Gly	Asn	Phe	Asn	Trp 550	Arg	Phe	Val	Phe	Pro 555	Phe	Asp	Tyr	Leu	Pro 560
Ala	Glu	Gln	Leu	Cys 565	Ile	Val	Ala	Lys	Lys 570	Glu	His	Phe	Trp	Ser 575	Ile
Asp	Gln	Thr	Glu 580	Phe	Arg	Ile	Pro	Pro 585	Arg	Leu	Ile	Ile	Gln 590	Ile	Trp
Asp	Asn	Asp 595	Lys	Phe	Ser	Leu	Asp 600	Asp	Tyr	Leu	Gly	Phe 605	Leu	Glu	Leu
Asp	Leu 610	Arg	His	Thr	Ile	Ile 615	Pro	Ala	Lys	Ser	Pro 620	Glu	Lys	Cys	Arg
Leu 625	Asp	Met	Ile	Pro	Asp 630	Leu	Lys	Ala	Met	Asn 635	Pro	Leu	Lys	Ala	Lys 640
Thr	Ala	Ser	Leu	Phe 645	Glu	Gln	Lys	Ser	Met 650	Lys	Gly	Trp	Trp	Pro 655	Cys
Tyr	Ala	Glu	Lys 660	Asp	Gly	Ala	Arg	Val 665	Met	Ala	Gly	Lys	Val 670	Glu	Met
Thr	Leu	Glu 675	Ile	Leu	Asn	Glu	Lys 680	Glu	Ala	Asp	Glu	Arg 685	Pro	Ala	Gly
Lys	Gly 690	Arg	Asp	Glu	Pro	Asn 695	Met	Asn	Pro	Lys	Leu 700	Asp	Leu	Pro	Asn
Arg 705	Pro	Glu	Thr	Ser	Phe 710	Leu	Trp	Phe	Thr	Asn 715	Pro	Cys	Lys	Thr	Met 720
Lys	Phe	Ile	Val	Trp	Arg	Arg	Phe	Lys	Trp	Val	Ile	Ile	Gly	Leu	Leu

197

725

730

735

Phe	Leu	Leu	Ile 740	Leu	Leu	Leu	Phe	Val 745	Ala	Val	Leu	Leu	Tyr 750	Ser	Leu
-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----

Pro	Asn	Tyr 755	Leu	Ser	Met	Lys	Ile 760	Val	Lys	Pro	Asn	Val 765			
-----	-----	------------	-----	-----	-----	-----	------------	-----	-----	-----	-----	------------	--	--	--

<210> 421

<211> 289

<212> PRT

<213> homo sapiens

<400> 421

Glu 1	Thr	Gln	Val	Val 5	Ile	Gln	Arg	Lys	Leu 10	Val	Ile	Val	Pro	Tyr 15	Leu
----------	-----	-----	-----	----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Asn	Asp	Gln	Pro 20	Gly	Trp	Asp	Ser	Lys 25	Phe	Arg	Leu	Val	Asn 30	Thr	Pro
-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----

Glu	Met	Leu 35	Phe	Phe	Arg	Asn	Asp 40	Thr	Glu	Leu	Phe	Gly 45	Trp	Lys	Val
-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----

Val	Lys 50	Arg	Glu	Asn	Lys	Ser 55	Pro	Val	Lys	Ile	Pro 60	Phe	Thr	Ile	Gln
-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----

Arg 65	Ser	Val	Met	Asp	Ile 70	Cys	Phe	Leu	Phe	Val 75	Phe	Phe	Ile	Ala	Arg 80
-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------

Asn	Pro	Ala	Phe	Asp 85	Val	Asp	Val	Thr	His 90	Phe	Leu	Ser	Cys	Asp 95	Ala
-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----	-----	-----	-----	-----------	-----

Phe	Leu	Val	Gln 100	Asp	Asn	Val	Leu	Gly 105	Val	Pro	Asp	Asp	His 110	Thr	Gln
-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----

Val	Val	Phe 115	Leu	Gly	Phe	Pro	Gly 120	Cys	Asp	Val	Glu	Arg 125	Arg	Ala	Trp
-----	-----	------------	-----	-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----	-----

Trp	Pro 130	Gln	Thr	Leu	Gly	Glu 135	Asn	Ile	His	Pro	His 140	Leu	Lys	Phe	Ser
-----	------------	-----	-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----	-----	-----

Leu 145	Gly	Asn	Val	Gly	Leu 150	Glu	Gly	Ala	Val	Gln 155	Ser	Pro	Cys	Phe	His 160
------------	-----	-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----	-----	-----	------------

Val	Leu	Arg	Asp	Gln 165	Pro	Leu	Ser	Pro	Glu 170	Asp	Val	Lys	Ser	Lys 175	Pro
-----	-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----	-----	-----	------------	-----

Leu	Phe	Arg	Gly 180	Pro	Glu	Val	Leu	Val 185	Gln	Asp	Phe	Val	Gly 190	Phe	Lys
-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----	-----	-----	------------	-----	-----

Phe	Ile	Gln	Ala	Val	Val	Ser	Ser	Ser	Ile	Ser	Asp	Ser	Thr	Pro	Ile
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

195							198 200			205					
Phe	Gly	Lys	Asp	Gly	Leu	Trp	Glu	Ala	Phe	Glu	Ser	Gly	Asp	Ile	Leu
	210					215					220				
Lys	Gln	Leu	Cys	Trp	Ser	Gln	Leu	Ile	Ser	Pro	Gly	Ile	Asp	Ser	Arg
225					230					235					240
Asn	Thr	Val	Leu	Leu	Trp	Tyr	Ala	Ala	Val	Gly	Pro	Lys	Ala	Gly	Lys
				245					250					255	
Glu	Ser	Val	Phe	Gln	Ile	Asn	Asn	Cys	Phe	Ser	Tyr	Phe	Phe	Ile	Pro
			260					265					270		
Gly	Lys	Gly	Val	Ile	Ile	Ile	Asp	Arg	Asn	Phe	Gln	Val	Phe	Phe	Leu
		275					280					285			

Arg

<210> 422
 <211> 90
 <212> PRT
 <213> homo sapiens

<400> 422

Phe	Phe	Leu	Tyr	Ser	Phe	Ser	Ser	Asp	Asn	His	Asp	Phe	Arg	Ser	Phe
1				5					10					45	
Lys	Thr	Ile	Tyr	Leu	Ala	Phe	Val	Ser	Gly	Gly	Glu	Leu	Ala	Ile	Ser
			20					25					30		
Leu	Leu	Lys	Pro	Ala	Ile	Ile	Val	Asn	Leu	Arg	Thr	Gly	Leu	Ser	Trp
		35					40					45			
Gly	Ser	Glu	Gly	Lys	Glu	Leu	Phe	Glu	Gln	Met	Cys	Val	Gly	Gly	Thr
	50					55					60				
Gly	Phe	His	Pro	Thr	Ala	Lys	Leu	Val	Leu	Leu	Glu	Ile	Ser	Phe	Tyr
65					70					75					80
Asn	Thr	Lys	Ile	Ser	Leu	Cys	Gln	Arg	Phe						
				85					90						

<210> 423
 <211> 81
 <212> PRT
 <213> homo sapiens

<400> 423

Thr	Pro	Ser	Gly	Ser	Ser	Trp	Arg	Thr	Tyr	Leu	Ser	Arg	Arg	Asn	Ser
1				5					10					15	
Lys	Gly	Glu	Arg	Thr	Gly	Pro	Pro	Leu	Ile	Pro	Met	Thr	Leu	Pro	Pro

20

25

30

Gly	Pro	Leu 35	Pro	Thr	Thr	Cys	Gly 40	Asn	Ser	Gln	Lys	Ile 45	Asn	Ser	Ser
Cys	Asn 50	Phe	Ser	Gly	Asp	Ile 55	Ala	Gln	Thr	His	Ile 60	Thr	Gly	Asp	Ala
His 65	Phe	Phe	Ser	Ile	Arg 70	Asp	Ser	Gln	Ser	Glu 75	Glu	Thr	Pro	Cys	Val 80

Ala

<210> 424

<211> 129

<212> PRT

<213> homo sapiens

<400> 424

Glu 1	Asn	Trp	Ala	Ser 5	Arg	Tyr	Phe	Gln	Ser 10	Ser	Phe	Thr	Glu	Gln 15	Lys
Val	Trp	Val	Gly 20	His	Trp	Leu	Glu	Gly 25	Asp	Ser	Pro	Thr	Leu 30	Thr	Val
Thr	Ile	Trp 35	Ala	Ala	Thr	Gly	Gly 40	Ile	Val	Gln	Leu	Ala 45	Ser	Arg	Cys
Ile	Pro 50	His	Leu	Lys	Tyr	Cys 55	Trp	Ile	Lys	Ala	Ile 60	Tyr	Thr	Leu	Ala
Lys 65	Ser	Lys	Ala	Lys	Glu 70	Ile	Ala	Leu	Asp	Pro 75	Glu	Ser	Gln	Gln	Asp 80
His	Leu	Ile	Phe	Pro 85	Asn	Gln	His	Leu	Gly 90	Gln	Gln	Leu	Pro	Ser 95	Thr
Phe	Leu	Phe	His 100	Ser	Trp	Phe	Phe	Phe 105	Phe	Phe	Phe	Leu	Gln 110	Asp	Leu
Ala	Val	Thr 115	Gln	Asp	Gly	Val	Gln 120	Trp	His	Asp	His	Gly 125	Ser	Leu	Gln

Pro

<210> 425

<211> 122

<212> PRT

<213> homo sapiens

<400> 425

Glu	Ala	Gln	Lys	Trp	Asp	Cys	Ile	Trp	Thr	Lys	Asn	Tyr	Lys	Lys	Val
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

1				5			200			10			15			
Gln	Ser	Leu	Val 20	Ser	Arg	Met	Gln	Ala 25	Leu	Ala	Leu	Gly	Asp 30	Gly	Ser	
Ser	Leu	Glu 35	Asn	Pro	Ala	Ala	Asp 40	Ser	Leu	Phe	Gln	Arg 45	Arg	Ser	Phe	
Glu	Arg 50	Arg	Val	Cys	Tyr	Ile 55	Ser	Phe	Phe	Thr	Val 60	Thr	Leu	Trp	Arg	
Leu 65	Lys	Asp	Leu	Val	Val 70	Ser	Cys	Phe	Leu	Lys 75	Ile	Thr	Gly	Ile	Trp 80	
Arg	Pro	Val	Lys	Pro 85	Phe	Trp	Thr	Asp	Ile 90	Ser	Ser	Lys	Tyr	Phe 95	Phe	
Ile	Lys	Val	Phe 100	Glu	Gly	Asp	Asp	Phe 105	Leu	Asp	Leu	Trp	Leu 110	Asp	Ile	
Leu	Gly	Phe 115	Pro	Asp	Tyr	Ile	Val 120	Leu	Ser							

<210> 426
 <211> 105
 <212> PRT
 <213> homo sapiens

<400> 426

Arg 1	Phe	Lys	Lys	Ser 5	Pro	Gln	Arg	Gln	Asn 10	His	Asn	Met	Ser	Arg 15	Arg
Asn	Lys	Lys	Leu 20	Leu	Asp	Ile	Pro	Gly 25	Ser	Phe	Leu	Tyr	Asp 30	Ser	Gly
Leu	Gln	Val 35	Lys	Phe	Leu	Ser	Leu 40	Ser	Ser	Glu	Glu	Phe 45	Glu	Leu	Ile
Pro	Ala 50	Lys	Tyr	Phe	Asn	Leu 55	Phe	Ile	Thr	Ala	Ser 60	Ser	Pro	Ile	Phe
Phe 65	Leu	Gly	Lys	Gly	Met 70	Leu	Gly	Leu	Gly	Pro 75	Lys	Leu	Leu	Ala	Gly 80
Gly	Gly	Ala	Met	Cys 85	His	Ser	Ile	Thr	Asp 90	Gly	Cys	Lys	Cys	Phe 95	Thr
Glu	Gln	Gly	Ser 100	Gly	Leu	Gln	Gln	Leu 105							

<210> 427
 <211> 96
 <212> PRT

<213> homo sapiens

<400> 427

Glu 1	Lys	Tyr	Glu	Glu 5	Leu	Arg	Arg	Lys	Lys 10	Lys	Lys	Lys	Lys	Arg 15	Thr
Asn	Asn	Leu	Asn 20	Cys	Leu	Leu	Gln	Asn 25	Val	Gly	His	Phe	Met 30	Leu	Arg
Glu	Glu	Phe 35	Gln	Gly	Met	Ala	Met 40	Glu	Cys	Thr	Ser	Met 45	Trp	Ala	Asp
Phe	Gln 50	Gln	Thr	Leu	Phe	Pro 55	Leu	Phe	Lys	Glu	Leu 60	Val	Asp	Tyr	Cys
His 65	Ser	Leu	His	Asn	Pro 70	Val	Gly	Ser	Ser	Asp 75	Pro	Tyr	Lys	Leu	Glu 80
Asn	Ile	Ile	Phe	Cys 85	Leu	Leu	Met	Ile	Gln 90	Leu	Met	Pro	Tyr	Ser 95	Ser

<210> 428

<211> 151

<212> PRT

<213> homo sapiens

<400> 428

Arg 1	Lys	Lys	Gly	Glu 5	Thr	Glu	Arg	Glu	Leu 10	Ser	Ala	Ser	Thr	Gln 15	Thr
Leu	Ser	His	Leu 20	Gln	Gly	His	Leu	Pro 25	Ser	Trp	Pro	Arg	Pro 30	Ala	Pro
Thr	Val	Thr 35	Ser	Ala	Ser	Arg	Arg 40	Phe	Ile	Ile	Lys	Lys 45	Asn	Gln	Lys
Gln	Ser 50	Gln	Asn	Gln	Asn	Lys 55	Ile	Gln	Lys	Glu	Lys 60	Thr	Trp	Gly	Asn
Gly 65	Met	Arg	Lys	Arg	Gly 70	Gly	Glu	Glu	Gly	Arg 75	Arg	Ala	Gly	Leu	Trp 80
Met	His	Asn	Ser	Arg 85	Ala	Arg	Gly	Leu	Gly 90	Arg	Lys	Ile	Pro	Gln 95	Arg
Pro	Ala	Ala	Cys 100	Val	Ala	Leu	Ala	Arg 105	His	Val	Val	Phe	Gly 110	Gly	Arg
Leu	Pro	Ile 115	His	Pro	Val	Glu	Ile 120	Leu	Val	Ala	Gly	Leu 125	Leu	Gly	Gly

202

Val	Lys	Pro	Val	Ser	Asp	Arg	Gln	Ala	Gly	Lys	Gly	Leu	Gly	Asp	Gly
	130					135					140				
Gly	Cys	Gly	Arg	Glu	Arg	Val									
145					150										

<210> 429
 <211> 150
 <212> PRT
 <213> homo sapiens
 <400> 429

Arg	His	Ala	Gly	Gly	Gly	Ala	Leu	Gly	Asn	Leu	Pro	Pro	Gln	Pro	Pro
1				5					10					15	
Gly	Ser	Gly	Val	Met	His	Pro	Glu	Thr	Cys	Pro	Ser	Thr	Phe	Leu	Ala
			20					25					30		
Ser	Pro	Leu	Pro	His	Ser	Ile	Ala	Pro	Gly	Leu	Phe	Leu	Leu	Asp	Phe
		35					40					45			
Val	Leu	Val	Leu	Ala	Leu	Phe	Leu	Ile	Phe	Phe	Tyr	Tyr	Glu	Ser	Pro
	50					55					60				
Gly	Arg	Arg	Gly	Asp	Ser	Gly	Ser	Trp	Pro	Gly	Pro	Gly	Arg	Gln	Val
65					70					75					80
Ala	Leu	Glu	Met	Gly	Lys	Cys	Leu	Cys	Arg	Gly	Ala	Glu	Leu	Ser	Leu
				85					90					95	
Cys	Phe	Ser	Phe	Phe	Pro	Leu	Leu	Leu	Pro	Leu	His	Thr	Pro	Val	Ala
			100					105					110		
Gly	Arg	Asn	Leu	Gly	Phe	Pro	Glu	Ser	Leu	Gly	Val	Pro	Pro	Phe	Leu
		115					120					125			
Pro	His	Pro	Gly	Gly	Thr	Pro	Arg	Ala	Pro	Gly	Leu	Phe	Leu	Leu	Leu
	130					135					140				
Phe	Ser	Phe	Trp	Ala	Val										
145					150										

<210> 430
 <211> 285
 <212> PRT
 <213> homo sapiens
 <400> 430

Ser	Trp	Arg	Thr	Gly	Gly	Trp	Ala	Tyr	Ala	Gly	Asp	Arg	Leu	Glu	Asn
1				5					10					15	
Lys	Thr	Ser	Val	Ser	Val	Ala	Ser	Trp	Ala	Ser	Ser	Leu	Asn	Ala	Arg
			20					25					30		

Met	Asp	Asn 35	Arg	Phe	Ala	Thr	Ala 40	Phe	Val	Ile	Ala	Cys 45	Val	Leu	Ser
Leu	Ile 50	Ser	Thr	Ile	Tyr	Met 55	Ala	Ala	Ser	Ile	Gly 60	Thr	Asp	Phe	Trp
Tyr 65	Glu	Tyr	Arg	Ser	Pro 70	Val	Gln	Glu	Asn	Ser 75	Ser	Asp	Leu	Asn	Lys 80
Ser	Ile	Trp	Asp	Glu 85	Phe	Ile	Ser	Asp	Glu 90	Ala	Asp	Glu	Lys	Thr 95	Tyr
Asn	Asp	Ala	Leu 100	Phe	Arg	Tyr	Asn	Gly 105	Thr	Val	Gly	Leu	Trp 110	Arg	Arg
Cys	Ile	Thr 115	Ile	Pro	Lys	Asn	Met 120	His	Trp	Tyr	Ser	Pro 125	Pro	Glu	Arg
Thr	Glu 130	Ser	Phe	Asp	Val	Val 135	Thr	Lys	Cys	Val	Ser 140	Phe	Thr	Leu	Thr
Glu 145	Gln	Phe	Met	Glu	Lys 150	Phe	Val	Asp	Pro	Gly 155	Asn	His	Asn	Ser	Gly 160
Ile	Asp	Leu	Leu	Arg 165	Thr	Tyr	Leu	Trp	Arg 170	Cys	Gln	Phe	Leu	Leu 175	Pro
Phe	Val	Ser	Leu 180	Gly	Leu	Met	Cys	Phe 185	Gly	Ala	Leu	Ile	Gly 190	Leu	Cys
Ala	Cys	Ile 195	Cys	Arg	Ser	Leu	Tyr 200	Pro	Thr	Ile	Ala	Thr 205	Gly	Ile	Leu
His	Leu 210	Leu	Ala	Gly	Leu	Cys 215	Thr	Leu	Gly	Ser	Val 220	Ser	Cys	Tyr	Val
Ala 225	Gly	Ile	Glu	Leu	Leu 230	His	Gln	Lys	Leu	Glu 235	Leu	Pro	Asp	Asn	Val 240
Ser	Gly	Glu	Phe	Gly 245	Trp	Ser	Phe	Cys	Leu 250	Ala	Cys	Val	Ser	Ala 255	Pro
Leu	Gln	Phe	Met 260	Ala	Ser	Ala	Leu	Phe 265	Ile	Trp	Ala	Ala	His 270	Thr	Asn
Arg	Lys	Glu 275	Tyr	Thr	Leu	Met	Lys 280	Ala	Tyr	Arg	Val	Ala 285			

```
<211> 116
<212> PRT
<213> homo sapiens
```

<400> 431

[illegible]